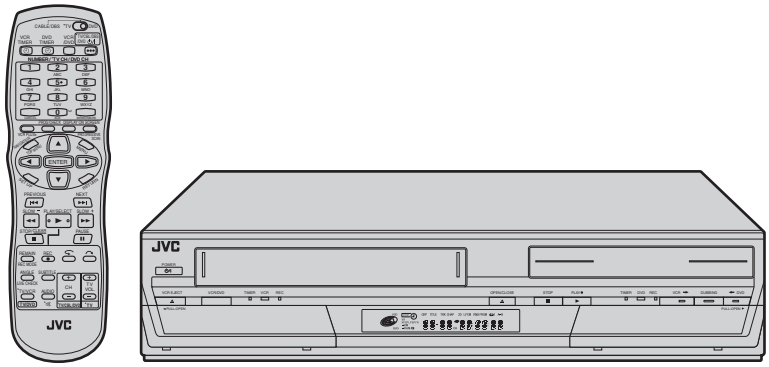
JVC

SERVICE MANUAL

DVD VIDEO RECORDER & VIDEO CASSETTE RECORDER

DR-MV1BEU2, DR-MV1SEK2, DR-MV1SEU2



DR-MV1BEU2, DR-MV1SEK2, DR-MV1SEU2 [D3RV21]

This model is a model to whom the DVD drive unit and some parts are changed based on DR-MV1BEU, DR-MV1SEK, DR-MV1SEU.
Please see page 2 about details and the distinction method.
Since this service manual has indicated only the "Parts List", please refer to another manual (DR-MV1BEU, DR-MV1SEK, DR-MV1SEU ISSUE No.YD014 2004/6) about other items.

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No.YD014B
2005/7

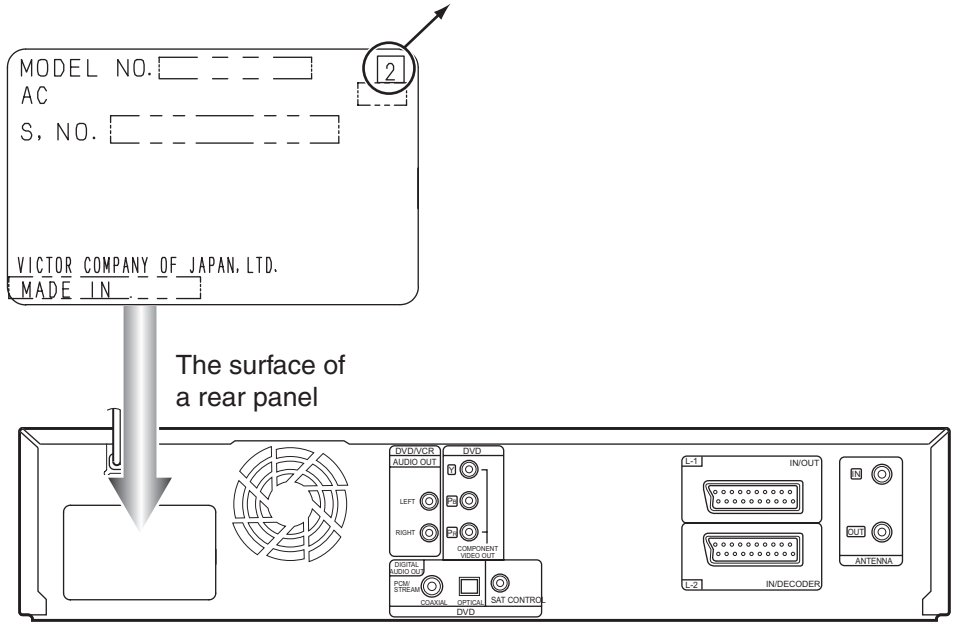
About this service manual

This model is a model to whom the DVD drive unit and some parts are changed based on DR-MV1BEU, DR-MV1SEK, DR-MV1SEU.
Since the way of recognizing is explained below, in the case of DR-MV1BEU2, DR-MV1SEK2, DR-MV1SEU2, please use this manual.
In the case of DR-MV1BEU, DR-MV1SEK, DR-MV1SEU, please refer to another service manual (No.YD014 2004/6).

HOW TO IDENTIFY MODELS

How to recognize from the appearance of the model concerned is written below.
Please distinguish from several contents currently printed on the rating label of the rear panel.

BLANK : DR-MV1BEU, DR-MV1SEK, DR-MV1SEU
2 : DR-MV1BEU2, DR-MV1SEK2, DR-MV1SEU2



SECTION 1
PRECAUTION

Please refer to "DR-MV1BEU, DR-MV1SEK, DR-MV1SEU (issue number : YD014)" about this section.

SECTION 2
SPECIFIC SERVICE INSTRUCTIONS

Please refer to "DR-MV1BEU, DR-MV1SEK, DR-MV1SEU (issue number : YD014)" about this section.

SECTION 3
DISASSEMBLY

Please refer to "DR-MV1BEU, DR-MV1SEK, DR-MV1SEU (issue number : YD014)" about this section.

SECTION 4
ADJUSTMENT

Please refer to "DR-MV1BEU, DR-MV1SEK, DR-MV1SEU (issue number : YD014)" about this section.

SECTION 5
TROUBLESHOOTING

Please refer to "DR-MV1BEU, DR-MV1SEK, DR-MV1SEU (issue number : YD014)" about this section.

JVC
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(No.YD014B)

Printed in Japan
VPT

PARTS LIST

[DR-MV1BEU2,DR-MV1SEK2,DR-MV1SEU2]

* SAFETY PRECAUTION
  Parts identified by the ⚠ symbol are critical for safety. Replace only with specified part numbers.
* BEWARE OF BOGUS PARTS
  Parts that do not meet specifications may cause trouble in regard to safety and performance. We recommend that genuine JVC parts be used.
* (x_) in a description column shows the number of the used part.

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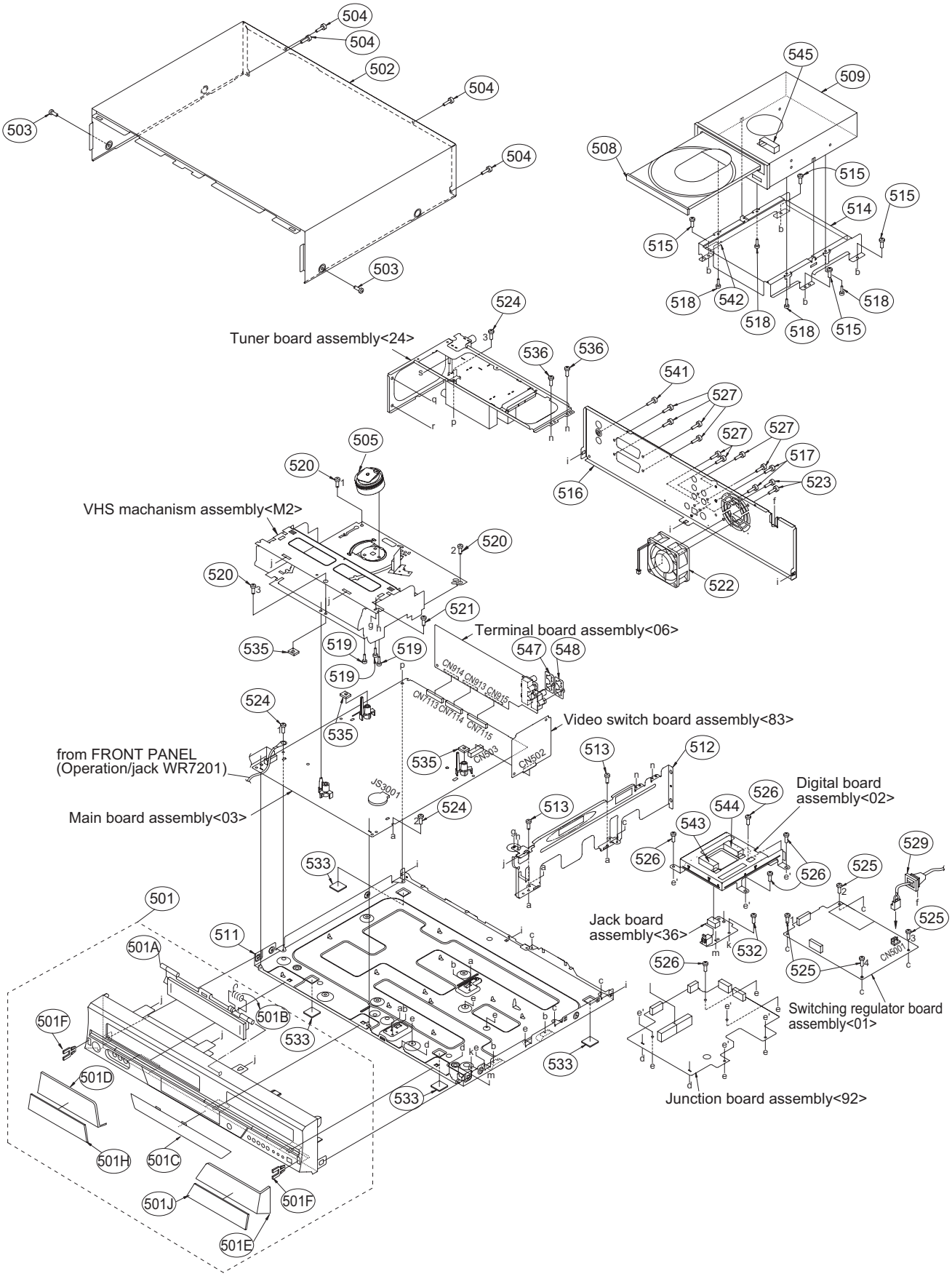
Electrical parts list 3-5

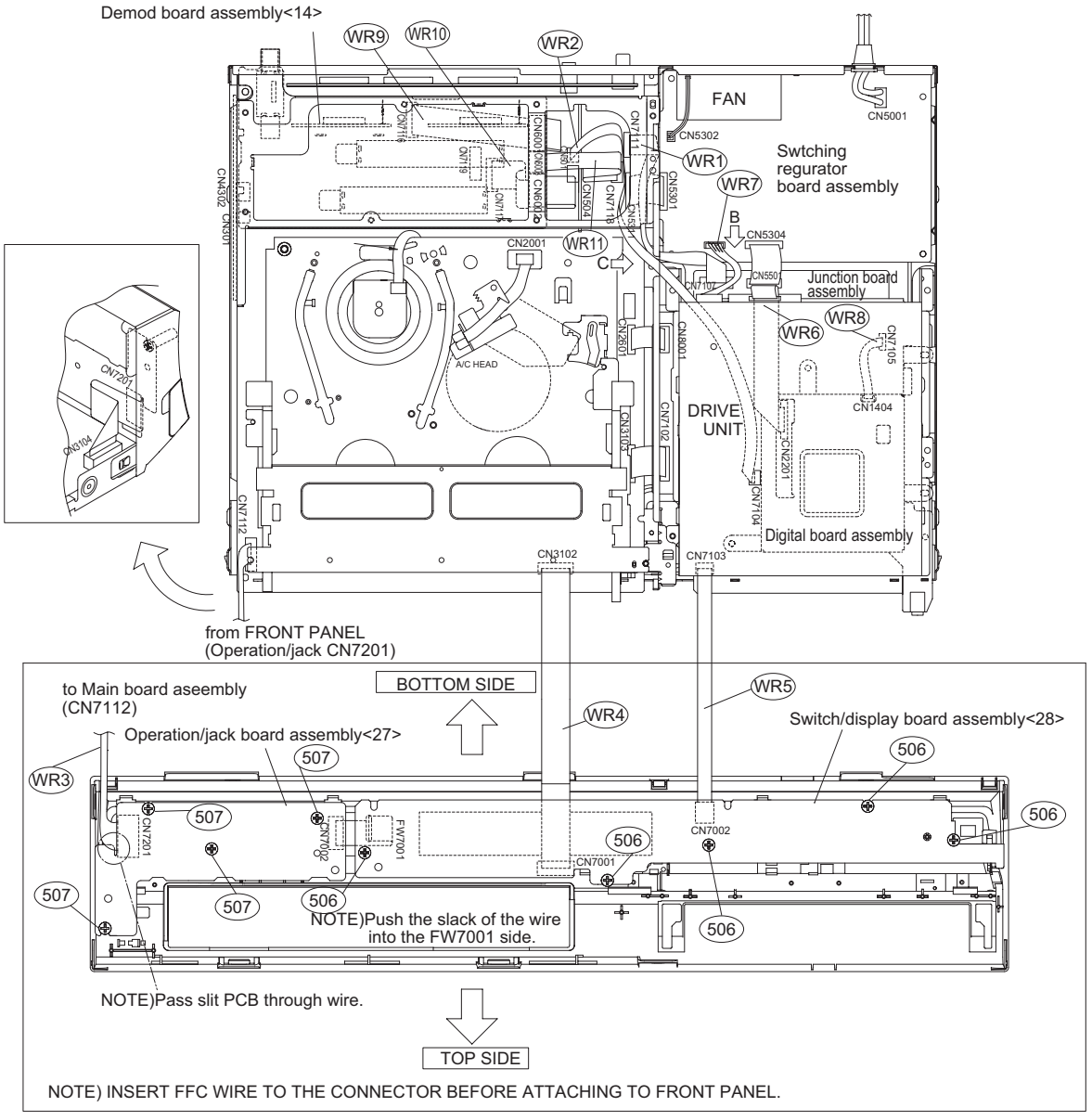
MODEL	MARK	MODEL	MARK
DR-MV1BEU2	A	DR-MV1SEU2	C
DR-MV1SEK2	B		

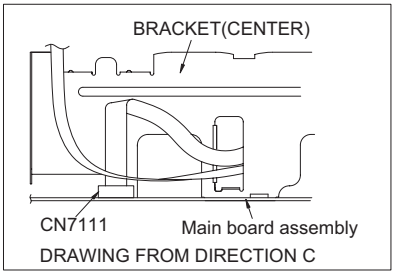
Exploded view of general assembly and parts list

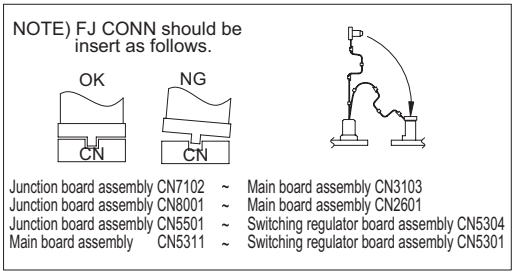
Block No. M1MM

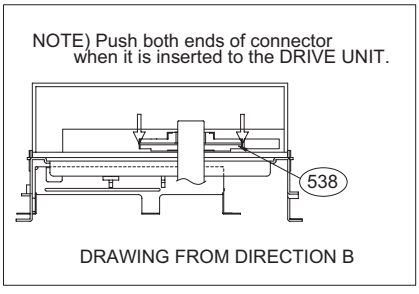


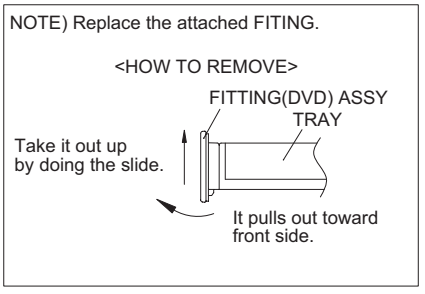
MODEL	MARK	MODEL	MARK
DR-MV1BEU2	A	DR-MV1SEU2	C
DR-MV1SEK2	B		






NOTE) FJ CONN should be insert as follows.
OK
NG
CN
CN
Junction board assembly CN7102 ~ Main board assembly CN3103
Junction board assembly CN8001 ~ Main board assembly CN2601
Junction board assembly CN5501 ~ Switching regulator board assembly CN5304
Main board assembly CN5311 ~ Switching regulator board assembly CN5301





MODEL	MARK	MODEL	MARK
DR-MV1BEU2	A	DR-MV1SEU2	C
DR-MV1SEK2	B		

General assembly

Block No. [M][1][M][M]

⚠ Symbol No.	Part No.	Part Name	Description	Local
⚠501	LP10526-013B	FRONT PANEL ASSY		A
⚠501	LP10526-008C	FRONT PANEL ASSY		B
⚠501	LP10526-007C	FRONT PANEL ASSY		C
501A	LP21232-006A	CASSETTE DOOR		A
501A	LP21232-001A	CASSETTE DOOR		B,C
501B	PQ46448	TORSION SPRING		
501C	LP31358-007A	DISPLAY WINDOW		A
501C	LP31358-005A	DISPLAY WINDOW		B,C
501D	LP31353-003B	DOOR(L)		A
501D	LP31353-001B	DOOR(L)		B,C
501E	LP31354-003B	DOOR(R)		A
501E	LP31354-001B	DOOR(R)		B,C
501F	PU60109	CATCHER	(x2)	
501H	LP31356-013A	WINDOW(L)		A
501H	LP31356-008A	WINDOW(L)		B
501H	LP31356-007A	WINDOW(L)		C
501J	LP31357-011A	WINDOW(R)		A
501J	LP31357-007A	WINDOW(R)		B
501J	LP31357-006A	WINDOW(R)		C
⚠502	LP10460-008B	TOP COVER		A
⚠502	LP10460-004C	TOP COVER		B,C
503	QYSBSG3006MA	TAP SCREW	M3 x 6mm TOP SIDE(x2)	A
503	QYSBSG3006NA	TAP SCREW	M3 x 6mm TOP SIDE(x2)	B,C
504	QYSBSG3006MA	TAP SCREW	M3 x 6mm TOP REAR(x4)	A
504	QYSBSG3006NA	TAP SCREW	M3 x 6mm TOP REAR(x4)	B,C
505	PDV2625A	DRUM FINAL ASSY		
506	QYTDSF2608ZA	TAP SCREW	M2.6 x 8mm SWITCH/DISPLAY(x5)	
507	QYTDSF2608ZA	TAP SCREW	M2.6 x 8mm OPERATION/JACK(x4)	
508	LP21348-001B	FITTING(DVD)		
⚠509	QAL0704-001	DRIVE UNIT		
⚠511	LP10525-001E	BOTTOM CHASSIS		
512	LP21222-001B	BRACKET(CENTER)		
513	LP31391-001A	SPECIAL SCREW	BRACKET(CENTER)(x2)	
514	LP21223-001A	BRACKET(DRIVE UNIT)		
515	LP31391-001A	SPECIAL SCREW	BRACKET(DVD)(x4)	
⚠516	LP21134-014B	REAR COVER		
517	QYSBSG3006NA	TAP SCREW	M3 x 6mm REAR COVER(x2)	
518	QYTDST3006ZA	TAP SCREW	M3 x 6mm DRIVE(x4)	
519	QYSPSPD3008ZA	SCREW	M3 x 8mm DRUM(x3)	
520	LP31391-002A	SPECIAL SCREW	MECHANISM(x3)	
521	LP31391-001A	SPECIAL SCREW	HOUSING	
522	QAR0349-001	FAN MOTOR		
523	QYTDSF3008MA	TAP SCREW	M3 x 8mm FAN(x2)	
524	LP31391-001A	SPECIAL SCREW	MAIN(x3)	
525	LP31391-001A	SPECIAL SCREW	SWITCHING REGULATOR(x4)	
526	LP31391-001A	SPECIAL SCREW	JUNCTION(x5)	
527	QYTDSF3008MA	TAP SCREW	M3 x 8mm JACK COVER(x8)	
⚠529	QMP51K0-170-K	POWER CORD	1.7m BLACK	B
⚠529	QMPK340-170-JC	POWER CORD	1.7m BLACK	A,C
532	LP31391-001A	SPECIAL SCREW	JACK	
533	LP31348-001A	FOOT	(x4)	
535	LP41140-001A	INSULATOR	(x3)	
536	LP31391-001A	SPECIAL SCREW	TUNER BRACKET(x2)	
538	QGZ0021A1-40	CONNECTOR	(1-40)	
541	QYTDST3005MA	TAP SCREW	M3 x 5mm TUNER	
542	LP30002-0F6A	SPACER	VDR BRACKET	
543	LP41171-001A	SHIELD TIGHT		
544	LP41171-001A	SHIELD TIGHT		
545	LP41171-001A	SHIELD TIGHT		
547	LP31345-001A	EARTH PLATE		
548	LP31345-001A	EARTH PLATE		
WR 1	QUQ112-0918CG-E	FFC WIRE	JUNCTION CN7107-MAIN CN7111	
WR 2	QUQ212-0430CG-E	FFC WIRE	VIDEO SWITCH CN501-JUNCTION CN7104	
WR 3	QUQ112-1308CG-E	FFC WIRE	OPERATION/JACK CN7201-MAIN CN7112	
WR 4	WJT0151-001A-E	E-CARD WIRE	SWITCH/DISPLAY CN7001-MAIN CN3102	
WR 5	QUQ212-0410CG-E	FFC WIRE	SWITCH/DISPLAY CN7002-JUNCTION CN7103	
WR 6	QUQ105-4020AF-E	FFC WIRE	DRIVE UNIT-DIGITAL CN2201	
WR 7	QJJ032-040804-E	SIN CR C-C WIRE	DRIVE UNIT-SWITCHING REGULATOR CN5303	
WR 8	QUQ210-0406CC-E	FFC WIRE	JUNCTION CN7105-DIGITAL CN1404	
WR 9	QUQ112-1420CG-E	FFC WIRE	TUNER CN6001-MAIN CN7116	
WR10	QUQ112-1315CG-E	FFC WIRE	TUNER CN6002-MAIN CN7117	
WR11	QUQ112-0716CG-E	FFC WIRE	TUNER CN6003-MAIN CN7118	

MODEL	MARK	MODEL	MARK
DR-MV1BEU2	A	DR-MV1SEU2	C
DR-MV1SEK2	B		

Electrical parts list

Digital board

Block No. [0][2]

⚠ Symbol No.	Part No.	Part Name	Description	Local
PW1	LPA10236-24B	DIGITAL BOARD ASSY		
IC1001	JCP8059-2	IC		
IC1002	HY57V161610ET-8	IC		
IC1002 or	K4S161622H-UC60	IC		
IC1002 or	HY57V161610ETP7	IC		
IC1201	LPN0889-001E	IC(FLASH)	(SERVICE)	
IC1202	SN74LVC373APW-X	IC(DIGITAL)		
IC1203	SN74LVC373APW-X	IC(DIGITAL)		
IC1401	DMN8652-B0L	IC(DIGITAL)		
IC1404	SN74HCT08APW-X	IC		
IC1405	SN74LV08APW-X	IC		
IC1601	HY5DU561622DT-J	IC		
IC1601 or	HY5DU561622DT-J	IC		
IC1602	HY5DU561622DT-J	IC		
IC1602 or	HY5DU561622DT-J	IC		
IC1701	PQ015YZ01Z-X	IC		
IC1801	TSB41AB2PAP	IC		
Q1002	2SA1037AK/QR/-X	TRANSISTOR		
Q1002 or	2SA1530A/QR/-X	TRANSISTOR		
Q1002 or	2SB709A/QR/-X	TRANSISTOR		
Q1003	2SA1037AK/QR/-X	TRANSISTOR		
Q1003 or	2SA1530A/QR/-X	TRANSISTOR		
Q1003 or	2SB709A/QR/-X	TRANSISTOR		
Q1004	2SA1037AK/QR/-X	TRANSISTOR		
Q1004 or	2SA1530A/QR/-X	TRANSISTOR		
Q1004 or	2SB709A/QR/-X	TRANSISTOR		
Q1005	2SA1037AK/QR/-X	TRANSISTOR		
Q1005 or	2SA1530A/QR/-X	TRANSISTOR		
Q1005 or	2SB709A/QR/-X	TRANSISTOR		
Q1006	2SA1037AK/QR/-X	TRANSISTOR		
Q1006 or	2SA1530A/QR/-X	TRANSISTOR		
Q1006 or	2SB709A/QR/-X	TRANSISTOR		
Q1007	2SA1037AK/QR/-X	TRANSISTOR		
Q1007 or	2SA1530A/QR/-X	TRANSISTOR		
Q1007 or	2SB709A/QR/-X	TRANSISTOR		
Q1008	UMZ1N-W	PAIR TRANSISTOR		
Q1008 or	BC847PN-X	PAIR TRANSISTOR		
Q1008 or	BC846PN-X	PAIR TRANSISTOR		
Q1009	2SC2412K/QRS/-X	TRANSISTOR		
Q1009 or	2SC3928A/QRS/-X	TRANSISTOR		
Q1009 or	2SD601A/QRS/-X	TRANSISTOR		
Q1010	2SC2412K/QRS/-X	TRANSISTOR		
Q1010 or	2SC3928A/QRS/-X	TRANSISTOR		
Q1010 or	2SD601A/QRS/-X	TRANSISTOR		
Q1011	2SC2412K/QRS/-X	TRANSISTOR		
Q1011 or	2SC3928A/QRS/-X	TRANSISTOR		
Q1011 or	2SD601A/QRS/-X	TRANSISTOR		
D1001	1SS355-X	SI DIODE		
D1001 or	MA111-X	SI DIODE		
D1002	1SS355-X	SI DIODE		
D1002 or	MA111-X	SI DIODE		
D1401	1SS355-X	SI DIODE		
D1401 or	MA111-X	SI DIODE		
D1402	1SS355-X	SI DIODE		
D1402 or	MA111-X	SI DIODE		
D1403	1SS355-X	SI DIODE		
D1403 or	MA111-X	SI DIODE		
C1001	NBE20JM-226X	TA E CAPACITOR	22uF 6.3V M	
C1002	NBE20JM-106X	TA E CAPACITOR	10uF 6.3V M	
C1003	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C1004	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C1005	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C1007	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C1008	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C1009	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C1012	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C1014	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C1015	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	

⚠ Symbol No.	Part No.	Part Name	Description	Local
C1017	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C1018	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C1019	NCB31EK-103X	C CAPACITOR	0.01uF 25V K	
C1020	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C1026	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C1030	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C1032	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C1033	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C1034	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C1035	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C1036	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C1038	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C1039	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C1041	NBE20JM-106X	TA E CAPACITOR	10uF 6.3V M	
C1042	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C1043	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C1044	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C1045	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C1046	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C1047	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C1051	NBE20JM-106X	TA E CAPACITOR	10uF 6.3V M	
C1052	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C1053	NCB31EK-103X	C CAPACITOR	0.01uF 25V K	
C1054	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C1055	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C1056	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C1057	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C1059	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C1060	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C1061	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C1062	NCB31EK-103X	C CAPACITOR	0.01uF 25V K	
C1065	NCB20JM-475X	C CAPACITOR	4.7uF 6.3V M	
C1077	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C1089	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C1090	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C1091	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C1092	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C1093	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C1094	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C1095	NBE20JM-106X	TA E CAPACITOR	10uF 6.3V M	
C1096	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C1097	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C1098	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C1203	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C1204	NEHM0JM-476X	E CAPACITOR	47uF 6.3V M	
C1206	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C1207	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C1401	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C1402	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C1403	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C1404	NEHM0JM-107X	E CAPACITOR	100uF 6.3V M	
C1405	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C1406	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C1407	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C1408	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C1409	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C1410	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C1411	NEHM0JM-107X	E CAPACITOR	100uF 6.3V M	
C1412	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C1413	NEHM0JM-107X	E CAPACITOR	100uF 6.3V M	
C1414	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C1416	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C1417	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C1418	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C1420	NBE20JM-106X	TA E CAPACITOR	10uF 6.3V M	
C1421	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C1422	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C1423	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C1424	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C1425	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C1426	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C1427	NBE20JM-106X	TA E CAPACITOR	10uF 6.3V M	
C1428	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C1429	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C1430	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C1431	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	

MODEL	MARK	MODEL	MARK
DR-MV1BEU2	A	DR-MV1SEU2	C
DR-MV1SEK2	B		

⚠ Symbol No.	Part No.	Part Name	Description	Local
C1432	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C1433	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C1435	NBE20JM-106X	TA E CAPACITOR	10uF 6.3V M	
C1436	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C1437	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C1438	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C1439	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C1440	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C1441	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C1442	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C1443	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C1444	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C1445	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C1446	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C1447	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C1448	NCB31EK-103X	C CAPACITOR	0.01uF 25V K	
C1449	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C1450	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C1452	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C1453	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C1455	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C1457	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C1458	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C1601	NBAD0GM-227X	OS E CAPACITOR	220uF 2.5V M	
C1602	NBAD0GM-227X	OS E CAPACITOR	220uF 2.5V M	
C1605	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C1606	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C1607	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C1608	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C1609	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C1610	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C1611	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C1612	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C1613	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C1614	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C1615	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C1616	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C1617	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C1618	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C1619	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C1620	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C1621	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C1622	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C1623	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C1624	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C1625	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C1638	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C1640	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C1642	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C1644	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C1646	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C1648	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C1650	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C1652	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C1654	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C1656	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C1658	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C1701	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C1702	NEHM0JM-107X	E CAPACITOR	100uF 6.3V M	
C1703	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C1704	NEHM0JM-107X	E CAPACITOR	100uF 6.3V M	
C1706	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C1707	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C1708	NBE40JM-476X	TA E CAPACITOR	47uF 6.3V M	
C1710	NBE40JM-476X	TA E CAPACITOR	47uF 6.3V M	
C1801	NCB30JK-105X	C CAPACITOR	1uF 6.3V K	
C1802	NDC31HJ-271X	C CAPACITOR	270pF 50V J	
C1803	NBE20JM-106X	TA E CAPACITOR	10uF 6.3V M	
C1804	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C1805	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C1806	NBE20JM-106X	TA E CAPACITOR	10uF 6.3V M	
C1807	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C1808	NDC31HJ-120X	C CAPACITOR	12pF 50V J	
C1809	NDC31HJ-120X	C CAPACITOR	12pF 50V J	
C1811	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C1812	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C2201	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C2202	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	

⚠ Symbol No.	Part No.	Part Name	Description	Local
R1001	NRSA63D-221X	MG RESISTOR	220Ω 1/16W D	
R1002	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
R1003	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
R1004	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
R1005	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J	
R1006	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
R1007	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J	
R1009	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J	
R1012	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
R1013	NRSA02J-0R0X	MG RESISTOR	0Ω 1/10W J	
R1014	NRSA02J-0R0X	MG RESISTOR	0Ω 1/10W J	
R1015	NRSA02J-0R0X	MG RESISTOR	0Ω 1/10W J	
R1017	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
R1018	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
R1019	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
R1021	NRSA63D-332X	MG RESISTOR	3.3kΩ 1/16W D	
R1022	NRSA63D-152X	MG RESISTOR	1.5kΩ 1/16W D	
R1024	NRSA63D-272X	MG RESISTOR	2.7kΩ 1/16W D	
R1027	NRSA63J-272X	MG RESISTOR	2.7kΩ 1/16W J	
R1028	NRSA63J-272X	MG RESISTOR	2.7kΩ 1/16W J	
R1029	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
R1030	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J	
R1031	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J	
R1032	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J	
R1033	NRSA63J-471X	MG RESISTOR	470Ω 1/16W J	
R1035	NQR0129-002X	FERRITE BEADS		
R1036	NRSA63J-102X	MG RESISTOR	1kΩ 1/16W J	
R1037	NRSA63D-101X	MG RESISTOR	100Ω 1/16W D	
R1038	NQR0129-002X	FERRITE BEADS		
R1039	NRSA63J-102X	MG RESISTOR	1kΩ 1/16W J	
R1040	NRSA63D-101X	MG RESISTOR	100Ω 1/16W D	
R1041	NQR0129-002X	FERRITE BEADS		
R1042	NRSA63J-102X	MG RESISTOR	1kΩ 1/16W J	
R1043	NRSA63D-151X	MG RESISTOR	150Ω 1/16W D	
R1044	NQR0129-002X	FERRITE BEADS		
R1045	NRSA63J-102X	MG RESISTOR	1kΩ 1/16W J	
R1046	NRSA63J-332X	MG RESISTOR	3.3kΩ 1/16W J	
R1047	NRSA63D-201X	MG RESISTOR	200Ω 1/16W D	
R1048	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
R1049	NRSA63J-102X	MG RESISTOR	1kΩ 1/16W J	
R1050	NRSA63J-152X	MG RESISTOR	1.5kΩ 1/16W J	
R1051	NRSA63D-271X	MG RESISTOR	270Ω 1/16W D	
R1052	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
R1053	NRSA63J-102X	MG RESISTOR	1kΩ 1/16W J	
R1054	NRSA63D-332X	MG RESISTOR	3.3kΩ 1/16W D	
R1055	NRSA63D-181X	MG RESISTOR	180Ω 1/16W D	
R1056	NRSA63J-222X	MG RESISTOR	2.2kΩ 1/16W J	
R1057	NRSA63J-330X	MG RESISTOR	33Ω 1/16W J	
R1059	NRSA63J-471X	MG RESISTOR	470Ω 1/16W J	
R1060	NRSA63J-223X	MG RESISTOR	22kΩ 1/16W J	
R1061	NRSA63J-223X	MG RESISTOR	22kΩ 1/16W J	
R1065	NRSA63J-121X	MG RESISTOR	120Ω 1/16W J	
R1066	NRSA63J-101X	MG RESISTOR	100Ω 1/16W J	
R1067	NRSA63J-121X	MG RESISTOR	120Ω 1/16W J	
R1068	NRSA63D-222X	MG RESISTOR	2.2kΩ 1/16W D	
R1069	NRSA63D-222X	MG RESISTOR	2.2kΩ 1/16W D	
R1070	NRSA63D-122X	MG RESISTOR	1.2kΩ 1/16W D	
R1071	NRSA63D-152X	MG RESISTOR	1.5kΩ 1/16W D	
R1072	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
R1216	NRSA63J-101X	MG RESISTOR	100Ω 1/16W J	
R1217	NRSA63J-101X	MG RESISTOR	100Ω 1/16W J	
R1218	NRSA63J-101X	MG RESISTOR	100Ω 1/16W J	
R1219	NRSA63J-101X	MG RESISTOR	100Ω 1/16W J	
R1220	NRSA63J-101X	MG RESISTOR	100Ω 1/16W J	
R1221	NRSA63J-101X	MG RESISTOR	100Ω 1/16W J	
R1222	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
R1223	NRSA63J-472X	MG RESISTOR	4.7kΩ 1/16W J	
R1224	NRSA63J-472X	MG RESISTOR	4.7kΩ 1/16W J	
R1225	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J	
R1226	NRSA63J-472X	MG RESISTOR	4.7kΩ 1/16W J	
R1229	NRSA63J-472X	MG RESISTOR	4.7kΩ 1/16W J	
R1230	NRSA63J-472X	MG RESISTOR	4.7kΩ 1/16W J	
R1231	NRSA63J-472X	MG RESISTOR	4.7kΩ 1/16W J	
R1401	NRSA63F-1181X	MG RESISTOR	1.18kΩ 1/16W F	
R1402	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
R1408	NRSA63J-102X	MG RESISTOR	1kΩ 1/16W J	
R1409	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J	

MODEL	MARK	MODEL	MARK
DR-MV1BEU2	A	DR-MV1SEU2	C
DR-MV1SEK2	B		

⚠ Symbol No.	Part No.	Part Name	Description	Local
R1410	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J	
R1411	NRSA63J-101X	MG RESISTOR	100Ω 1/16W J	
R1412	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J	
R1413	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J	
R1414	NRSA63J-102X	MG RESISTOR	1kΩ 1/16W J	
R1415	NRSA63J-102X	MG RESISTOR	1kΩ 1/16W J	
R1416	NRSA63J-102X	MG RESISTOR	1kΩ 1/16W J	
R1417	NRSA63J-102X	MG RESISTOR	1kΩ 1/16W J	
R1419	NRSA63J-101X	MG RESISTOR	100Ω 1/16W J	
R1420	NRSA63J-101X	MG RESISTOR	100Ω 1/16W J	
R1427	NRSA63J-101X	MG RESISTOR	100Ω 1/16W J	
R1428	NRSA63J-101X	MG RESISTOR	100Ω 1/16W J	
R1429	NRSA63J-101X	MG RESISTOR	100Ω 1/16W J	
R1430	NRSA63J-101X	MG RESISTOR	100Ω 1/16W J	
R1431	NRSA63J-101X	MG RESISTOR	100Ω 1/16W J	
R1434	NRSA63J-101X	MG RESISTOR	100Ω 1/16W J	
R1435	NRSA63J-101X	MG RESISTOR	100Ω 1/16W J	
R1436	NRSA63J-101X	MG RESISTOR	100Ω 1/16W J	
R1437	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
R1438	NRSA63J-101X	MG RESISTOR	100Ω 1/16W J	
R1439	NRSA63J-101X	MG RESISTOR	100Ω 1/16W J	
R1440	NRSA63J-101X	MG RESISTOR	100Ω 1/16W J	
R1441	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J	
R1443	NRSA63J-472X	MG RESISTOR	4.7kΩ 1/16W J	
R1444	NRSA63J-472X	MG RESISTOR	4.7kΩ 1/16W J	
R1445	NRSA63J-101X	MG RESISTOR	100Ω 1/16W J	
R1446	NRSA63J-101X	MG RESISTOR	100Ω 1/16W J	
R1447	NRSA63J-101X	MG RESISTOR	100Ω 1/16W J	
R1448	NRSA63J-101X	MG RESISTOR	100Ω 1/16W J	
R1449	NRSA63J-101X	MG RESISTOR	100Ω 1/16W J	
R1450	NRSA63J-101X	MG RESISTOR	100Ω 1/16W J	
R1451	NRSA63J-101X	MG RESISTOR	100Ω 1/16W J	
R1452	NRSA63J-101X	MG RESISTOR	100Ω 1/16W J	
R1458	NRSA63J-101X	MG RESISTOR	100Ω 1/16W J	
R1459	NRSA63J-101X	MG RESISTOR	100Ω 1/16W J	
R1460	NRSA63J-101X	MG RESISTOR	100Ω 1/16W J	
R1461	NRSA63J-101X	MG RESISTOR	100Ω 1/16W J	
R1462	NRSA63J-101X	MG RESISTOR	100Ω 1/16W J	
R1465	NRSA63J-101X	MG RESISTOR	100Ω 1/16W J	
R1466	NRSA63J-101X	MG RESISTOR	100Ω 1/16W J	
R1468	NRSA63J-101X	MG RESISTOR	100Ω 1/16W J	
R1469	NRSA63J-102X	MG RESISTOR	1kΩ 1/16W J	
R1470	NRSA63J-102X	MG RESISTOR	1kΩ 1/16W J	
R1471	NRSA63J-101X	MG RESISTOR	100Ω 1/16W J	
R1472	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
R1473	NRSA63J-101X	MG RESISTOR	100Ω 1/16W J	
R1474	NRSA63J-101X	MG RESISTOR	100Ω 1/16W J	
R1475	NRSA63J-101X	MG RESISTOR	100Ω 1/16W J	
R1476	NRSA63J-101X	MG RESISTOR	100Ω 1/16W J	
R1477	NRSA63J-101X	MG RESISTOR	100Ω 1/16W J	
R1478	NRSA63J-101X	MG RESISTOR	100Ω 1/16W J	
R1479	NRSA63J-101X	MG RESISTOR	100Ω 1/16W J	
R1480	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
R1481	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
R1482	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
R1491	NRSA63J-102X	MG RESISTOR	1kΩ 1/16W J	
R1493	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
R1496	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J	
R1497	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J	
R1498	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J	
R1601	NRSA63J-100X	MG RESISTOR	10Ω 1/16W J	
R1602	NRSA63J-100X	MG RESISTOR	10Ω 1/16W J	
R1603	NRSA63J-100X	MG RESISTOR	10Ω 1/16W J	
R1604	NRSA63J-100X	MG RESISTOR	10Ω 1/16W J	
R1605	NRSA63J-470X	MG RESISTOR	47Ω 1/16W J	
R1606	NRSA63J-470X	MG RESISTOR	47Ω 1/16W J	
R1607	NRSA63J-470X	MG RESISTOR	47Ω 1/16W J	
R1608	NRSA63J-470X	MG RESISTOR	47Ω 1/16W J	
R1613	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
R1614	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
R1615	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
R1616	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
R1617	NRSA63J-270X	MG RESISTOR	27Ω 1/16W J	
R1618	NRSA63J-270X	MG RESISTOR	27Ω 1/16W J	
R1619	NRSA63J-101X	MG RESISTOR	100Ω 1/16W J	
R1620	NRSA63J-101X	MG RESISTOR	100Ω 1/16W J	
R1621	NRSA63J-270X	MG RESISTOR	27Ω 1/16W J	
R1622	NRSA63J-270X	MG RESISTOR	27Ω 1/16W J	
R1623	NRSA63J-270X	MG RESISTOR	27Ω 1/16W J	
R1624	NRSA63J-270X	MG RESISTOR	27Ω 1/16W J	
R1625	NRSA63J-101X	MG RESISTOR	100Ω 1/16W J	
R1626	NRSA63J-101X	MG RESISTOR	100Ω 1/16W J	
R1627	NRSA63J-270X	MG RESISTOR	27Ω 1/16W J	
R1628	NRSA63J-270X	MG RESISTOR	27Ω 1/16W J	
R1642	NRSA63J-100X	MG RESISTOR	10Ω 1/16W J	
R1644	NRSA63J-470X	MG RESISTOR	47Ω 1/16W J	
R1649	NRSA63J-101X	MG RESISTOR	100Ω 1/16W J	
R1650	NRSA63J-101X	MG RESISTOR	100Ω 1/16W J	
R1651	NRSA63J-101X	MG RESISTOR	100Ω 1/16W J	
R1652	NRSA63J-101X	MG RESISTOR	100Ω 1/16W J	
R1653	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
R1654	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
R1655	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
R1656	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
R1657	NRSA63J-220X	MG RESISTOR	22Ω 1/16W J	
R1658	NRSA63J-220X	MG RESISTOR	22Ω 1/16W J	
R1659	NRSA63J-220X	MG RESISTOR	22Ω 1/16W J	
R1660	NRSA63J-220X	MG RESISTOR	22Ω 1/16W J	
R1701	NRSA63J-271X	MG RESISTOR	270Ω 1/16W J	
R1702	NRSA63J-102X	MG RESISTOR	1kΩ 1/16W J	
R1703	NRSA63D-222X	MG RESISTOR	2.2kΩ 1/16W D	
R1704	NRSA63D-222X	MG RESISTOR	2.2kΩ 1/16W D	
R1801	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
R1802	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
R1803	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J	
R1804	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J	
R1805	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
R1807	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J	
R1809	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J	
R1810	NRSA63J-394X	MG RESISTOR	390kΩ 1/16W J	
R1812	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
R1813	NRSA63J-560X	MG RESISTOR	56Ω 1/16W J	
R1814	NRSA63J-560X	MG RESISTOR	56Ω 1/16W J	
R1815	NRSA63J-560X	MG RESISTOR	56Ω 1/16W J	
R1816	NRSA63J-560X	MG RESISTOR	56Ω 1/16W J	
R1817	NRSA63J-512X	MG RESISTOR	5.1kΩ 1/16W J	
R1818	NRSA63D-562X	MG RESISTOR	5.6kΩ 1/16W D	
R1819	NRSA63D-751X	MG RESISTOR	750Ω 1/16W D	
R1820	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J	
R1821	NRSA63J-102X	MG RESISTOR	1kΩ 1/16W J	
R1822	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
R2201	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J	
R2202	NRSA63J-562X	MG RESISTOR	5.6kΩ 1/16W J	
R2203	NRSA63J-472X	MG RESISTOR	4.7kΩ 1/16W J	
R2204	NRSA63J-330X	MG RESISTOR	33Ω 1/16W J	
R2205	NRSA63J-820X	MG RESISTOR	82Ω 1/16W J	
R2206	NRSA63J-220X	MG RESISTOR	22Ω 1/16W J	
R2207	NRSA63J-220X	MG RESISTOR	22Ω 1/16W J	
R2208	NRSA63J-820X	MG RESISTOR	82Ω 1/16W J	
R2209	NRSA63J-220X	MG RESISTOR	22Ω 1/16W J	
R2210	NRSA63J-820X	MG RESISTOR	82Ω 1/16W J	
R2211	NRSA63J-330X	MG RESISTOR	33Ω 1/16W J	
R2212	NRSA63J-330X	MG RESISTOR	33Ω 1/16W J	
R2213	NRSA63J-330X	MG RESISTOR	33Ω 1/16W J	
R2214	NRSA63J-330X	MG RESISTOR	33Ω 1/16W J	
R2215	NRSA63J-330X	MG RESISTOR	33Ω 1/16W J	
RA1001	NRZ0040-0R0X	NET RESISTOR	0Ω 1/16W J x4	
RA1002	NRZ0040-0R0X	NET RESISTOR	0Ω 1/16W J x4	
RA1003	NRZ0034-103W	NET RESISTOR	10kΩ 1/32W J x4	
RA1004	NRZ0034-103W	NET RESISTOR	10kΩ 1/32W J x4	
RA1005	NRZ0034-103W	NET RESISTOR	10kΩ 1/32W J x4	
RA1006	NRZ0034-103W	NET RESISTOR	10kΩ 1/32W J x4	
RA1201	NRZ0034-103W	NET RESISTOR	10kΩ 1/32W J x4	
RA1202	NRZ0034-103W	NET RESISTOR	10kΩ 1/32W J x4	
RA1203	NRZ0034-103W	NET RESISTOR	10kΩ 1/32W J x4	
RA1204	NRZ0034-103W	NET RESISTOR	10kΩ 1/32W J x4	
RA1401	NRZ0040-101X	NET RESISTOR	100Ω 1/16W J x4	
RA1402	NRZ0040-101X	NET RESISTOR	100Ω 1/16W J x4	
RA1403	NRZ0040-101X	NET RESISTOR	100Ω 1/16W J x4	
RA1404	NRZ0040-101X	NET RESISTOR	100Ω 1/16W J x4	
RA1405	NRZ0034-101W	NET RESISTOR	100Ω 1/32W J x4	
RA1406	NRZ0034-101W	NET RESISTOR	100Ω 1/32W J x4	
RA1407	NRZ0034-101W	NET RESISTOR	100Ω 1/32W J x4	
RA1408	NRZ0034-101W	NET RESISTOR	100Ω 1/32W J x4	
RA1409	NRZ0034-101W	NET RESISTOR	100Ω 1/32W J x4	
RA1410	NRZ0034-101W	NET RESISTOR	100Ω 1/32W J x4	

MODEL	MARK	MODEL	MARK
DR-MV1BEU2	A	DR-MV1SEU2	C
DR-MV1SEK2	B		

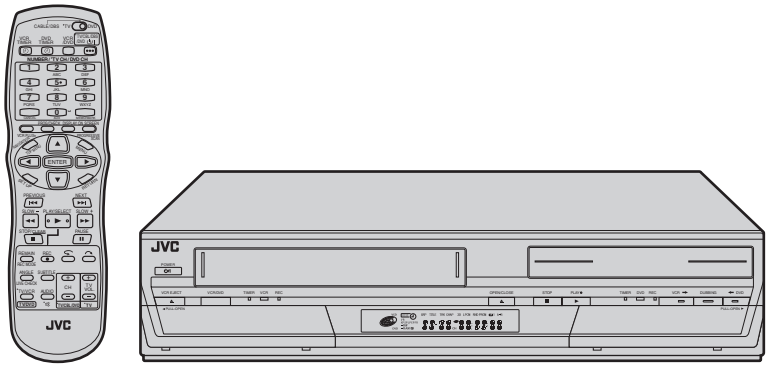
⚠ Symbol No.	Part No.	Part Name	Description	Local
RA1411	NRZ0034-101W	NET RESISTOR	100Ω 1/32W J x4	
RA1601	NRZ0040-101X	NET RESISTOR	100Ω 1/16W J x4	
RA1602	NRZ0040-101X	NET RESISTOR	100Ω 1/16W J x4	
RA1603	NRZ0040-101X	NET RESISTOR	100Ω 1/16W J x4	
RA1604	NRZ0040-101X	NET RESISTOR	100Ω 1/16W J x4	
RA1605	NRZ0040-101X	NET RESISTOR	100Ω 1/16W J x4	
RA1606	NRZ0040-101X	NET RESISTOR	100Ω 1/16W J x4	
RA1607	NRZ0040-101X	NET RESISTOR	100Ω 1/16W J x4	
RA1608	NRZ0040-101X	NET RESISTOR	100Ω 1/16W J x4	
RA1609	NRZ0040-220X	NET RESISTOR	22Ω 1/16W J x4	
RA1610	NRZ0040-220X	NET RESISTOR	22Ω 1/16W J x4	
RA1611	NRZ0040-220X	NET RESISTOR	22Ω 1/16W J x4	
RA1612	NRZ0040-220X	NET RESISTOR	22Ω 1/16W J x4	
RA1613	NRZ0040-220X	NET RESISTOR	22Ω 1/16W J x4	
RA1614	NRZ0040-220X	NET RESISTOR	22Ω 1/16W J x4	
RA1615	NRZ0040-220X	NET RESISTOR	22Ω 1/16W J x4	
RA1616	NRZ0040-220X	NET RESISTOR	22Ω 1/16W J x4	
RA1617	NRZ0040-101X	NET RESISTOR	100Ω 1/16W J x4	
RA1618	NRZ0040-101X	NET RESISTOR	100Ω 1/16W J x4	
RA1619	NRZ0040-101X	NET RESISTOR	100Ω 1/16W J x4	
RA1620	NRZ0040-101X	NET RESISTOR	100Ω 1/16W J x4	
RA1621	NRZ0040-101X	NET RESISTOR	100Ω 1/16W J x4	
RA1622	NRZ0040-101X	NET RESISTOR	100Ω 1/16W J x4	
RA1623	NRZ0040-101X	NET RESISTOR	100Ω 1/16W J x4	
RA1624	NRZ0040-101X	NET RESISTOR	100Ω 1/16W J x4	
RA1625	NRZ0040-100X	NET RESISTOR	10Ω 1/16W J x4	
RA1626	NRZ0040-100X	NET RESISTOR	10Ω 1/16W J x4	
RA1627	NRZ0040-100X	NET RESISTOR	10Ω 1/16W J x4	
RA1628	NRZ0040-100X	NET RESISTOR	10Ω 1/16W J x4	
RA1629	NRZ0040-470X	NET RESISTOR	47Ω 1/16W J x4	
RA1630	NRZ0040-470X	NET RESISTOR	47Ω 1/16W J x4	
RA1631	NRZ0040-470X	NET RESISTOR	47Ω 1/16W J x4	
RA1632	NRZ0040-470X	NET RESISTOR	47Ω 1/16W J x4	
RA1801	NRZ0034-103W	NET RESISTOR	10kΩ 1/32W J x4	
RA1802	NRZ0034-103W	NET RESISTOR	10kΩ 1/32W J x4	
RA2201	NRZ0040-0R0X	NET RESISTOR	0Ω 1/16W J x4	
RA2202	NRZ0040-0R0X	NET RESISTOR	0Ω 1/16W J x4	
RA2203	NRZ0040-0R0X	NET RESISTOR	0Ω 1/16W J x4	
RA2204	NRZ0040-0R0X	NET RESISTOR	0Ω 1/16W J x4	
RA2205	NRZ0040-0R0X	NET RESISTOR	0Ω 1/16W J x4	
RA2206	NRZ0040-0R0X	NET RESISTOR	0Ω 1/16W J x4	
RA2207	NRZ0040-0R0X	NET RESISTOR	0Ω 1/16W J x4	
RA2208	NRZ0040-330X	NET RESISTOR	33Ω 1/16W J x4	
RA2209	NRZ0040-330X	NET RESISTOR	33Ω 1/16W J x4	
RA2210	NRZ0040-330X	NET RESISTOR	33Ω 1/16W J x4	
RA2211	NRZ0040-330X	NET RESISTOR	33Ω 1/16W J x4	
L1004	NQL144K-100X	P COIL	10uH K	
L1801	NQL144K-100X	P COIL	10uH K	
T1801	NQR0444-001X	CHOKE COIL		
B1001	NRSA02J-0R0X	MG RESISTOR	0Ω 1/10W J	
B1007	NRSA02J-0R0X	MG RESISTOR	0Ω 1/10W J	
B1008	NQR0339-001X	FERRITE BEADS		
B1204	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
B1802	NRSA02J-0R0X	MG RESISTOR	0Ω 1/10W J	
CN1001	QGB2027L5-28X	CONNECTOR	B-B (1-28)	
CN1002	QGB2027L5-28X	CONNECTOR	B-B (1-28)	
CN1404	QGF1016F2-04W	CONNECTOR	FFC/FPC (1-4)	
CN1801	QGB2027L1-10X	CONNECTOR	B-B (1-10)	
CN2201	QGF0539C1-40W	CONNECTOR	FFC/FPC (1-40)	
K1001	NQR0339-001X	FERRITE BEADS		
K1002	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
K1003	NQR0129-002X	FERRITE BEADS		
K1004	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
K1005	NQR0129-002X	FERRITE BEADS		
K1006	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
K1008	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
K1009	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
K1010	NQR0129-002X	FERRITE BEADS		
K1011	NQR0129-002X	FERRITE BEADS		
K1012	NQR0129-002X	FERRITE BEADS		
K1013	NQR0129-002X	FERRITE BEADS		
K1014	NQR0129-002X	FERRITE BEADS		
K1015	NQR0129-002X	FERRITE BEADS		
K1016	NQR0129-002X	FERRITE BEADS		
K1017	NQR0129-002X	FERRITE BEADS		
K1018	NQR0129-002X	FERRITE BEADS		
K1019	NRSA02J-0R0X	MG RESISTOR	0Ω 1/10W J	
K1020	NQR0129-002X	FERRITE BEADS		
K1201	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
K1401	NRSA02J-0R0X	MG RESISTOR	0Ω 1/10W J	
K1402	NRSA02J-0R0X	MG RESISTOR	0Ω 1/10W J	
K1403	NRSA02J-0R0X	MG RESISTOR	0Ω 1/10W J	
K1404	NQR0339-001X	FERRITE BEADS		
K1406	NQR0339-001X	FERRITE BEADS		
K1407	NRSA02J-0R0X	MG RESISTOR	0Ω 1/10W J	
K1408	NRSA02J-0R0X	MG RESISTOR	0Ω 1/10W J	
K1701	NRSA02J-0R0X	MG RESISTOR	0Ω 1/10W J	
K1702	NRSA02J-0R0X	MG RESISTOR	0Ω 1/10W J	
K1801	NRSA02J-0R0X	MG RESISTOR	0Ω 1/10W J	
K2201	NQR0129-002X	FERRITE BEADS		
K2202	NQR0129-002X	FERRITE BEADS		
K2203	NQR0129-002X	FERRITE BEADS		
K2204	NQR0129-002X	FERRITE BEADS		
K2205	NQR0129-002X	FERRITE BEADS		
K2206	NQR0129-002X	FERRITE BEADS		
K2207	NQR0129-002X	FERRITE BEADS		
K2208	NQR0129-002X	FERRITE BEADS		
K2209	NQR0129-002X	FERRITE BEADS		
K2210	NQR0129-002X	FERRITE BEADS		
K2211	NQR0129-002X	FERRITE BEADS		
K2212	NQR0129-002X	FERRITE BEADS		
K2213	NQR0129-002X	FERRITE BEADS		
K2214	NQR0129-002X	FERRITE BEADS		
K2215	NQR0129-002X	FERRITE BEADS		
K2216	NQR0129-002X	FERRITE BEADS		
K2217	NQR0129-002X	FERRITE BEADS		
K2218	NQR0129-002X	FERRITE BEADS		
K2219	NQR0129-002X	FERRITE BEADS		
K2220	NQR0129-002X	FERRITE BEADS		
K2221	NQR0129-002X	FERRITE BEADS		
LC1401	NQR0415-002X	EMI FILTER	1uF 16V Z	
LC1402	NQR0415-002X	EMI FILTER	1uF 16V Z	
LC1403	NQR0415-002X	EMI FILTER	1uF 16V Z	
OT1	LP40769-001A	SPACER		
SD1	LP21293-001A	SHIELD FRAME(DIGITAL)		
X1401	NAX0580-001X	CXO	27.0000MHz	
X1801	NAX0666-001X	CRYSTAL	24.576000MHz	

JVC

SERVICE MANUAL

DVD VIDEO RECORDER & VIDEO CASSETTE RECORDER

DR-MV1BEK, DR-MV1BEU, DR-MV1SEF, DR-MV1SEK, DR-MV1SEU



DR-MV1BEK, DR-MV1BEU, DR-MV1SEF,
DR-MV1SEK, DR-MV1SEU [D3RV21]

For disassembling and assembling of MECHANISM ASSEMBLY, refer to the SERVICE MANUAL No.86700(MECHANISM ASSEMBLY).

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No.YD014
2004/6

SPECIFICATION

	DR-MV1BEK, DR-MV1SEK	DR-MV1BEU, DR-MV1SEU	DR-MV1SEF
GENERAL			
Power requirement	AC 220 V - 240 V, 50/60 Hz		
Power consumption			
Power on	42 W		
Power off	23.5 W		
Temperature			
Operating	5°C to 35°C		
Storage	-20°C to 60°C		
Operating position	Horizontal only		
Dimensions (W × H × D)	435 mm × 96 mm × 347 mm		
Weight	6.3 kg		
VIDEO/AUDIO (DVD deck)			
Recording format	DVD-RAM: DVD Video Recording format DVD-R: DVD-Video format DVD-RW: DVD-Video format, DVD Video Recording format		
Recording time	Maximum 8 hours (with 4.7 GB disc) (XP): Approx. 1 hour, (SP): Approx. 2 hours, (LP): Approx. 4 hours, (EP): Approx. 6 hours, (FR): Approx. 1 hour - 8 hours		
Audio recording system	Dolby Digital (2 ch), Linear PCM (XP mode only)		
Video recording compression system	MPEG2 (CBR/VBR)		
Input/Output			
S-video input	Y: 0.8 - 1.2 Vp-p, 75 Ω, C: 0.2 - 0.4 Vp-p, 75Ω		
Video input	0.5 - 2.0 Vp-p, 75 Ω (pin jack)		
Audio input	-8 dB, 50 kΩ (pin jack), Corresponding to mono (left)		
Audio output	-8 dB, 1 kΩ (pin jack)		
i.Link	4-pin for DV input		
Component video output	Y: 1.0 Vp-p, 75 Ω, CB/CR, PB/PR: 0.7 Vp-p, 75Ω Corresponding to copy protection		
Digital audio output	Optical: -18 dBm, 660 nm, Coaxial: 0.7 Vp-p, 75 Ω, Corresponding to Dolby Digital and DTS Digital Surround, Bit stream Selectable in digital audio output setting menu		
VIDEO/AUDIO (VCR Deck)			
Signal system	PAL color signal and CCIR monochrome signal, 625 lines/50 fields		PAL/SECAM color signal and CCIR monochrome signal, 625 lines/50 fields
Recording system	DA4 (Double Azimuth) head helical scan system		
Format	VHS PAL standard		VHS PAL/SECAM standard
Tape width	12.65 mm		
Tape speed			
(SP)	23.39 mm/s		
(LP)	11.70 mm/s		
Maximum recording time			
(SP)	240 min. with E-240 video cassette		
(LP)	480 min. with E-240 video cassette		
Signal-to-noise ratio:	45 dB		
Horizontal resolution	230 lines		250 lines(VHS-PAL)/240 lines(VHS-SECAM)
Frequency range	70 Hz to 10,000 Hz (Normal audio) 20 Hz to 20,000 Hz (Hi-Fi audio)		
Input/Output	21-pin SCART connectors: IN/OUT × 1, IN/DECODER × 1 RCA connectors: VIDEO IN × 1, AUDIO IN × 1, AUDIO OUT × 1		
TUNER/TIMER			
TV channel storage capacity	99 positions (+AUX position)		
Tuning system	Frequency synthesized tuner		
Channel coverage(PAL)	VHF : 44.5 MHz - 143 MHz/143 MHz - 470 MHz UHF : 470 MHz - 862 MHz	VHF : 47 MHz - 89 MHz/104 MHz - 300 MHz/302 MHz - 470 MHz UHF : 470 MHz - 862 MHz	VHF(LOW) : 47MHz-89MHz(E2-E4,X,Y,Z) VHF(HIGH) : 104MHz-300MHz(E5-E12,S1-S20, M1-M10,U1-U10) Hyper : 302MHz-470MHz(S21-S41) UHF : 470 MHz - 862 MHz(E21-E69)
Channel coverage(SECAM-L)	-		VHF(LOW) : 49MHz-65MHz(2-4) VHF(HIGH) : 104MHz-300 MHz(5-10,CATV) Hyper : 300MHz-470MHz(CATV) UHF : 470MHz-862MHz(21-69)
Memory backup time	Approx. 60 minutes		
ACCESSORIES			
Provided accessories	RF cable, 21-pin SCART cable, Satellite Controller, Infrared remote control unit, “AA(R6)” battery × 2		

- Specifications shown are for SP mode unless otherwise specified.
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- Manufactured under license from Dolby Laboratories. "Dolby" and the double-D symbol are trademarks of Dolby Laboratories.
- "DTS" and "DTS Digital Out" are trademarks of Digital Theater Systems, Inc.
- SHOWVIEW is a trademark of Gemstar Development Corporation. The SHOWVIEW system is manufactured under licence from Gemstar Development Corporation.(EU/EF MODEL).
- VIDEO Plus+ and PlusCode are registered trademarks of Gemstar Development Corporation. The VIDEO Plus+ system is manufactured under license from Gemstar Development Corporation.(EK MODEL).
- i.LINK (i.Link) refers to the IEEE1394-1995 industry specification and extensions thereof. The i.LINK logo is used for products compliant with the i.Link standard.

SECTION 1
PRECAUTION

1.1 SAFTY PRECAUTIONS

Prior to shipment from the factory, JVC products are strictly inspected to conform with the recognized product safety and electrical codes of the countries in which they are to be sold.However,in order to maintain such compliance, it is equally important to implement the following precautions when a set is being serviced.

1.1.1 Precautions during Servicing

(1) Locations requiring special caution are denoted by labels and inscriptions on the cabinet, chassis and certain parts of the product.When performing service, be sure to read and comply with these and other cautionary notices appearing in the operation and service manuals.

(2) Parts identified by the ⚠symbol and shaded ( ) parts are critical for safety.
Replace only with specified part numbers.

NOTE :

Parts in this category also include those specified to comply with X-ray emission standards for products using cathode ray tubes and those specified for compliance with various regulations regarding spurious radiation emission.

(3) Fuse replacement caution notice.
Caution for continued protection against fire hazard.
Replace only with same type and rated fuse(s) as specified.

(4) Use specified internal wiring. Note especially:
- Wires covered with PVC tubing
- Double insulated wires
- High voltage leads

(5) Use specified insulating materials for hazardous live parts. Note especially:
- Insulation Tape
- PVC tubing
- Spacers
- Insulation sheets for transistors
- Barrier

(6) When replacing AC primary side components (transformers, power cords, noise blocking capacitors, etc.) wrap ends of wires securely about the terminals before soldering.

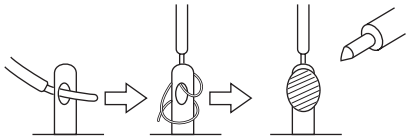


Fig.1-1-1

(7) Observe that wires do not contact heat producing parts (heatsinks, oxide metal film resistors, fusible resistors, etc.)

(8) Check that replaced wires do not contact sharp edged or pointed parts.

(9) When a power cord has been replaced, check that 10-15 kg of force in any direction will not loosen it.

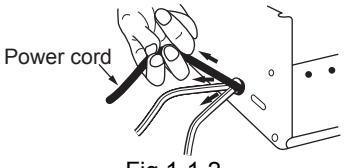


Fig.1-1-2

(10) Also check areas surrounding repaired locations.

(11) Products using cathode ray tubes (CRTs)In regard to such products, the cathode ray tubes themselves, the high voltage circuits, and related circuits are specified for compliance with recognized codes pertaining to X-ray emission. Consequently, when servicing these products, replace the cathode ray tubes and other parts with only the specified parts. Under no circumstances attempt to modify these circuits.Unauthorized modification can increase the high voltage value and cause X-ray emission from the cathode ray tube.

(12) Crimp type wire connectorIn such cases as when replacing the power transformer in sets where the connections between the power cord and power trans former primary lead wires are performed using crimp type connectors, if replacing the connectors is unavoidable, in order to prevent safety hazards, perform carefully and precisely according to the following steps.

- **Connector part number** :E03830-001
- **Required tool** : Connector crimping tool of the proper type which will not damage insulated parts.
- **Replacement procedure**

a) Remove the old connector by cutting the wires at a point close to the connector.Important : Do not reuse a connector (discard it).

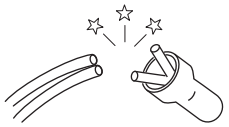


Fig.1-1-3

b) Strip about 15 mm of the insulation from the ends of the wires. If the wires are stranded, twist the strands to avoid frayed conductors.

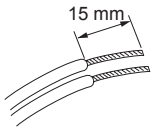


Fig.1-1-4

c) Align the lengths of the wires to be connected. Insert the wires fully into the connector.

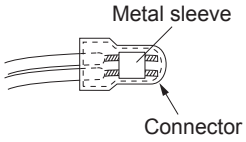


Fig.1-1-5

d) As shown in Fig.1-1-6, use the crimping tool to crimp the metal sleeve at the center position. Be sure to crimp fully to the complete closure of the tool.

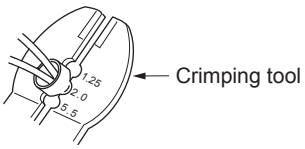


Fig.1-1-6

e) Check the four points noted in Fig.1-1-7.

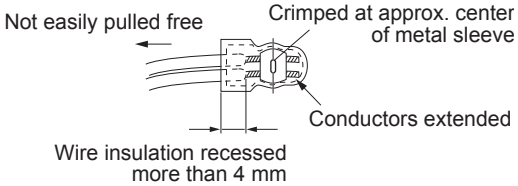

Not easily pulled free
Crimped at approx. center of metal sleeve
Conductors extended
Wire insulation recessed more than 4 mm

Fig.1-1-7

1.1.2 Safety Check after Servicing

Examine the area surrounding the repaired location for damage or deterioration. Observe that screws, parts and wires have been returned to original positions, Afterwards, perform the following tests and confirm the specified values in order to verify compliance with safety standards.

(1) Insulation resistance test
Confirm the specified insulation resistance or greater between power cord plug prongs and externally exposed parts of the set (RF terminals, antenna terminals, video and audio input and output terminals, microphone jacks, earphone jacks, etc.).See table 1 below.

(2) Dielectric strength test
Confirm specified dielectric strength or greater between power cord plug prongs and exposed accessible parts of the set (RF terminals, antenna terminals, video and audio input and output terminals, microphone jacks, earphone jacks, etc.). See Fig.1-1-11 below.

(3) Clearance distance
When replacing primary circuit components, confirm specified clearance distance (d), (d') between soldered terminals, and between terminals and surrounding metallic parts. See Fig.1-1-11 below.

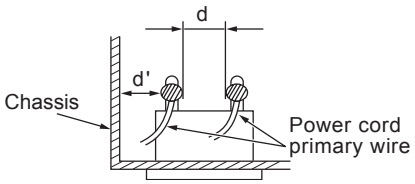


Fig.1-1-8

(4) Leakage current test
Confirm specified or lower leakage current between earth ground/power cord plug prongs and externally exposed accessible parts (RF terminals, antenna terminals, video and audio input and output terminals, microphone jacks, earphone jacks, etc.).
Measuring Method : (Power ON)Insert load Z between earth ground/power cord plug prongs and externally exposed accessible parts. Use an AC voltmeter to measure across both terminals of load Z. See Fig.1-1-9 and following Fig.1-1-12.

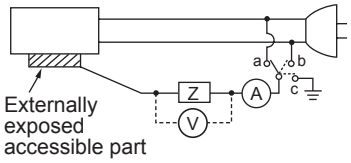
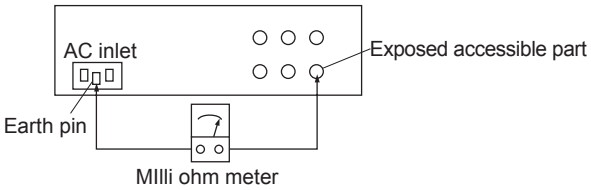


Fig.1-1-9

(5) Grounding (Class 1 model only)
Confirm specified or lower grounding impedance between earth pin in AC inlet and externally exposed accessible parts (Video in, Video out, Audio in, Audio out or Fixing screw etc.).Measuring Method:
Connect milli ohm meter between earth pin in AC inlet and exposed accessible parts. See Fig.1-1-10 and grounding specifications.



Grounding Specifications

Region	Grounding Impedance (Z)
USA & Canada	Z ≦ 0.1 ohm
Europe & Australia	Z ≦ 0.5 ohm

Fig.1-1-10

AC Line Voltage	Region	Insulation Resistance (R)	Dielectric Strength	Clearance Distance (d), (d')
100 V	Japan	R≧ 1 MΩ/500 V DC	AC 1 kV 1 minute	d, d' ≧ 3 mm
100 to 240 V			AC 1.5 kV 1 minute	d, d' ≧ 4 mm
110 to 130 V	USA & Canada	1 MΩ ≦R≦ 12 MΩ/500 V DC	AC 1 kV 1 minute	d, d' ≧ 3.2 mm
110 to 130 V 200 to 240 V	Europe & Australia	R≧ 10 MΩ/500 V DC	AC 3 kV 1 minute (Class Ⅱ) AC 1.5 kV 1 minute (Class Ⅰ)	d ≧ 4 mm d' ≧ 8 mm (Power cord) d' ≧ 6 mm (Primary wire)

Fig.1-1-11

AC Line Voltage	Region	Load Z	Leakage Current (i)	a, b, c
100 V	Japan	1 kΩ	i ≦ 1 mA rms	Exposed accessible parts
110 to 130 V	USA & Canada	0.15 μF, 1.5 kΩ	i ≦ 0.5 mA rms	Exposed accessible parts
110 to 130 V 220 to 240 V	Europe & Australia	2 kΩ	i ≦ 0.7 mA peak i ≦ 2 mA dc	Antenna earth terminals
		50 kΩ	i ≦ 0.7 mA peak i ≦ 2 mA dc	Other terminals

Fig.1-1-12

NOTE :
These tables are unofficial and for reference only. Be sure to confirm the precise values for your particular country and locality.

SECTION 2
SPECIFIC SERVICE INSTRUCTIONS

2.1 Different table of features

The following table indicates main different points between models DR-MV1BEK, DR-MV1BEU, DR-MV1SEF, DR-MV1SEK and DR-MV1SEU.

ITEM	DR-MV1BEK	DR-MV1BEU	DR-MV1SEF	DR-MV1SEK	DR-MV1SEU
POWER PLUG	3PIN	CEE	←	3PIN	CEE
BODY COLOUR	BLACK	←	PURE SILVER	←	←
VHS	PAL/NTSC PB on PAL TV with HiFi	PAL / MESECAM (MANUAL) / NTSC PB on PAL TV with HiFi	←	PAL/NTSC PB on PAL TV with HiFi	PAL / MESECAM (MANUAL) / NTSC PB on PAL TV with HiFi
BROADCASTING STANDARD	I	B/G, D/K	L, L', B/G	I	B/G, D/K
STEREO DECODER	NICAM	NICAM/A2	NICAM(L,B/G) / A2(B/G)	NICAM	NICAM/A2
VCR PLUS+	VIDEO Plus+DELUXE	SHOWVIEW DELUXE	←	VIDEO Plus+DELUXE	SHOWVIEW DELUXE
VPS/PDC	NOT USED	USED	NOT USED	←	USED

NOTE:
Mark ← As same as left.

2.2 Service position

This unit has been designed so that the Mechanism and Main board assemblies can be removed together from the bottom chassis. Before diagnosing or servicing the circuit boards, take out the major parts from the bottom chassis.

2.2.1 How to set the "Service position"

(1) Refer to the disassembly procedure and perform the disassembly of the major parts before removing the Mechanism assembly.
(2) Remove the screws that fix the Mechanism, Main board assembly to the bottom chassis. If any other screws are used to fix the boards, remove them also.
(3) Remove the combined Mechanism, DVD unit, Switching regulator, digital, junction and Main board assemblies.
(4) If any other major parts are used, remove them also.
(5) Connect the wires and connectors of the major parts that have been removed in steps (1) to (4). (Refer to Fig. 2-2a.)
(6) Place the combined Mechanism, Main board and other board assemblies upside down.
(7) Insert the power cord plug into the power outlet and then proceed with the diagnostics and servicing of the board assembly.

Notes:

- **Before inserting the power cord plug into the power outlet, make sure that none of the electrical parts are able to short-circuit between the workbench and the board assembly.**
- **For the disassembly procedure of the major parts and details of the precautions to be taken, see "Removing the major parts".**
- **If there are wire connections from the Main board and Mechanism assemblies to the other major parts, be sure to remove them (including wires connected to the major parts) first before performing step (2).**
- **When carrying out diagnosis and repair of the Main board assembly in the "Service position", be sure to ground both the Main board and Mechanism assemblies. If they are improperly grounded, there may be noise on the playback picture or FDP counter display may move even when the mechanism is kept in an inoperative status.**
- **In order to diagnose the playback or recording of the cassette tape, set the Mechanism assembly to the required mode before placing it upside down. If the mechanism mode is changed (including ejection) while it is in an upside down position the tape inside may be damaged.**
- **For some models, the mechanism and board assemblies are attached by connectors only. When carrying out a diagnosis or repair of the boards in the "Service position", make sure that the connectors are not disconnected.**

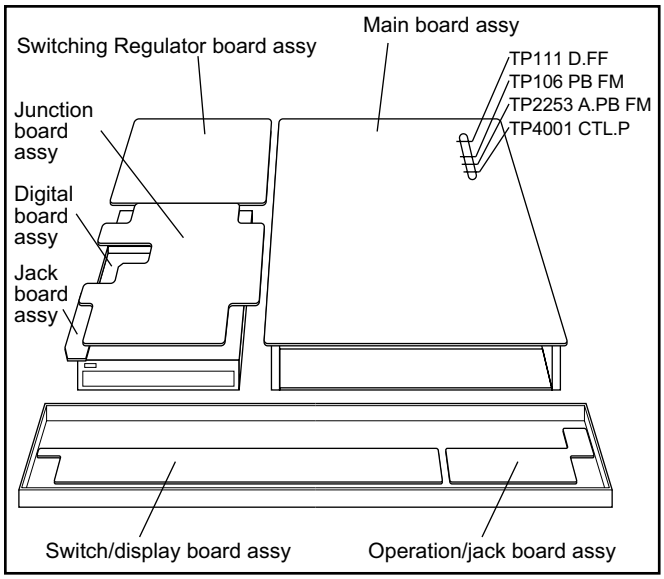


Fig.2-2a

2.3 Jig RCU mode

This unit uses the following two modes for receiving remote control codes.

(1) User RCU mode:Ordinary mode for use by the user.

(2) Jig RCU mode: Mode for use in production and servicing.

When using the Jig RCU, it is required to set the VCR to the Jig RCU mode (the mode in which codes from the Jig RCU can be received). As both of the above two modes are stored in the EEPROM, it is required to set the VCR back to the User RCU mode each time that an adjustment is made or to check that the necessary operations have been completed.These modes can be set by the operations described below.

Note:

- **When the unit is set to JIG mode and when the unit is under JIG mode, the remote control unit attached to product operates only in "Remote Control Code 1". Since the unit is in "Remote Control Code 3" when it is shipped and just after its batteries are changed, "Remote Control Code 3" needs to be changed to "Remote Control Code 1."**
- **Confirm the RCU mode when exchanged parts. Since some SERVICE PARTS sets the VCR to the Jig RCU mode as initial setting. Therefore please set the VCR to the user RCU mode after replacing the EEPROM.**

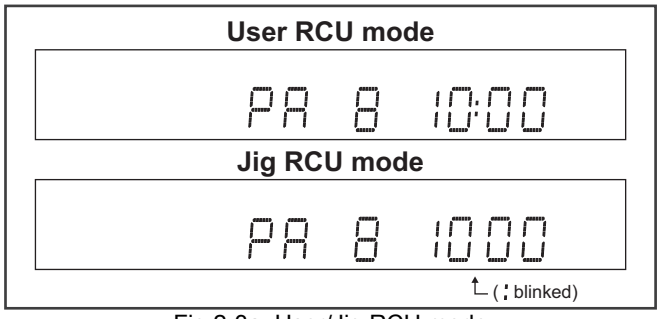


Fig.2-3a User/Jig RCU mode

2.3.1 Changing Remote Control Code

(1) Slide the TV/CABLE/SAT/DVD switch to DVD.

(2) Press the number button "1" of the remote control unit while pressing the "SET UP" button of the remote control unit. Then,press the "ENTER" button, and then release the "SET UP" button.

(3) Press the "POWER" button on the unit to turn off the unit.

(4) Press the "PLAY" button on the unit for over 5 seconds while the unit is turned off. The code currently set appears on the front display panel.

(5) Press the "STOP" button on the remote control to change the unit's code. When FDP indicator displays "DVD1," it means that the Remote Control Code has been changed to "1."

2.3.2 Setting the Jig RCU mode

<Method 1>

(1) Turn on the power.

(2) Press the "VCR/DVD" button repeatedly on the unit so that the DVD lamp lights up on the unit.

(3) Press the following remocon keys continuously within 2 seconds " SET UP " → " 2 " → " 8 " → " ENTER ".
When the VCR is set to the Jig RCU mode, the symbols (" : ") in the time display of the FDP are blinked.
(Refer to Fig.2-3a User/Jig RCU mode)

<Method 2>

(1) Unplug the power cord plug from the power outlet.

(2) Press and hold the "REC" and "PAUSE" buttons on the VCR simultaneously, while plugging the power cord plug into the power outlet.
When the VCR is set to the Jig RCU mode, the symbols (" : ") in the time display of the FDP are blinked.

2.3.3 Setting the User RCU mode

(1) Turn off the power.

(2) Press the "REC" and "PAUSE" buttons of the VCR simultaneously. Alternatively, transmit the code "9D" from the Jig RCU.

2.4 Mechanism service mode

This model has a unique function to enter the mechanism into every operation mode without loading of any cassette tape. This function is called the "Mechanism service mode".

2.4.1 How to set the "Mechanism service mode"

(1) Set the VCR to the Jig RCU mode (the mode in which codes from the Jig RCU can be received)

(2) Transmit the code "E5" from the Jig RCU.

(3) Release the lug of the Cassette holder and then slide the Cassette holder toward the direction where the Cassette holder is loaded by manually.

(4) The cassette holder lowers and, when the loading has completed, the mechanism enters the desired mode.
When the VCR is set to the Mechanism service mode, the symbols ("HDD") in the FDP (LED) are turned on.

2.4.2 How to exit from the "Mechanism service mode"

(1) Unplug the power cord plug from the power outlet.

2.5 Maintenance and inspection

2.5.1 Cleaning

Regular cleaning of the transport system parts is desirable but practically impossible. So make it a rule to carry out cleaning of the tape transport system whenever the machine is serviced.
When the video head, tape guide and/or brush get soiled, the playback picture may appear inferior or at worst disappear, resulting in possible tape damage.

Note:

- **Absolutely avoid sweeping the upper drum vertically as this will cause damage to the video head.**

(1) When cleaning the upper drum (especially the video head), soak a piece of closely woven cloth with alcohol and while holding the cloth onto the upper drum by the fingers, turn the upper drum counterclockwise.

(2) To clean the parts of the tape transport system other than the upper drum, use a piece of closely woven cloth or a cotton swab soaked with alcohol.

(3) After cleaning, make sure that the cleaned parts are completely dry before using the cassette tape.

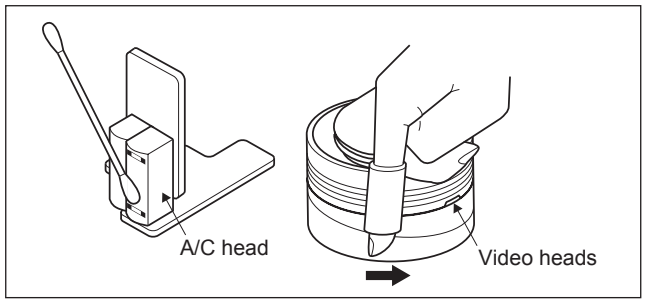


Fig.2-5a

2.5.2 Lubrication

With no need for periodical lubrication, you have only to lubricate new parts after replacement. If any oil or grease on contact parts is soiled, wipe it off and newly lubricate the parts.

Note:

- **See the "mechanism assembly" diagram of the "parts list" for the lubricating or greasing spots, and for the types of oil or grease to be used.**

2.5.3 Suggested servicing schedule for main components

The following table indicates the suggested period for such service measures as cleaning, lubrication and replacement. In practice, the indicated periods will vary widely according to environmental and usage conditions. However, the indicated components should be inspected when a set is brought for service and the maintenance work performed if necessary. Also note that rubber parts may deform in time, even if the set is not used.

System	Parts name	Operation hours	
		1000H	2000H
Tape transport	Drum assembly	C,X	X
	A/C head	C,X	C,X
	Pinch roller arm assembly	C	C
	Full erase head	C	C
	Tension arm assembly	C	C
	Capstan motor (Shaft)	C	C
	Guide arm assembly	C	C
Drive	Capstan motor		X
	Capstan brake assembly		X
	Main brake assembly		X
	Belt (Capstan)	X	X
	Loading motor		X
	Clutch unit		X
	Worm gear		X
	Control plate		X
Other	Rotary encoder		X

C : Cleaning
X : Inspection or Replacement if necessary

SECTION 3
DISASSEMBLY

3.1 Removing the major parts

3.1.1 Destination of connectors

Two kinds of double-arrows in connection tables respectively show kinds of connector/wires.

⇔ : Flat wire ↔ : Wire ⬌ : Board to board (B-B)

: The connector of the side to remove

CONN. No.	CONNECTOR				PIN No.
WR2a	Main CN101	⇔	Digital CN761		40
WR2b	Main CN103	⇔	Digital CN762		10

■ **Destination of connectors**

CONN. No.	CONNECTOR				PIN No.
WR2a	Main CN7112	⇔	Operation/jack CN7201		13
WR2b	Main CN3102	⇔	Switch/display CN7001		11
WR2c	Junction CN7103	⇔	Switch/display CN7002		4
WR3a	Main CN2001	⇔	A/C head		6
WR3b	Drum assembly	⇔	Main CN1		9
WR4a	DVD unit	⇔	Digital CN2201		40
WR4b	DVD unit	↔	Regulator CN5303		4
WR5a	Junction CN7106	⇔	Digital CN1901		4
CN7108 (CN1001)	Junction CN7108	⬌	Digital CN1001		28
CN7109 (CN1002)	Junction CN7109	⬌	Digital CN1002		28
CN4104 (CN1801)	Jack CN4104	⬌	Digital CN1801		10
WR7a	Junction CN7104	⇔	Video switch CN501		4
WR7b	Main CN3103	⬌	Junction CN7102		15
WR7c	Main CN2601	⬌	Junction CN8001		11
WR7d	Junction CN7107	⇔	Main CN7111		9
WR7e	Regulator CN5304	⬌	Junction CN5501		15
WR8a	Regulator CN5301	⬌	Main CN5311		15
WR8b	Regulator CN5302	↔	Fun motor		2
WR11a	Tuner CN6001	⇔	Main CN7116		14
WR11b	Tuner CN6003	⇔	Main CN7118		7
WR11c	Tuner CN6002	⇔	Main CN7117		13
WR12a	Main CN7119	⇔	SECAM CN301		15
WR12b	Video switch CN504	⇔	SECAM CN4302		6

3.1.2 How to read the procedure table

This table shows the steps for disassembly of the externally furnished parts and board assemblies. Reverse these steps when re-assembling them.

Step/ Loc No.	Part Name	Fig. No.	Point	Note
[1]	Top cover	3-1a	4(S1a),(S1b),3(L1a), 2(SD1a),(P1a),(W1a), CN1(WR1a),	<Note 1a>
	Bracket		2(S1c)	

(1) (2) (3) (4) (5)

(1) Order of steps in Procedure
When reassembling, perform the step(s) in the reverse order.
These numbers are also used as the identification (location) No. of parts Figures.

(2) Part name to be removed or installed.

(3) Fig. No. showing procedure or part location.

(4) Identification of part to be removed, unhooked, unlocked, released, unplugged, unclamped or unsoldered.
P= Spring, W= Washer, S= Screw, L= Locking tab, SD= Solder, CN**(WR**)= Remove the wire (WR**) from the connector (CN**).

Note:
- **The bracketed ( ) WR of the connector symbol are assigned nos. in priority order and do not correspond to those on the spare parts list.**

(5) Adjustment information for installation

3.1.3 Disassembly procedure

Step/ Loc No.	Part Name	Fig. No.	Point	Note
[1]	Top cover	3-1d	6(S1a)	
[2]	Front panel assembly (Operation/jack board assembly) (Switch/display board assembly)	3-1a, 3-1d 3-1e	3(L2a),5(L2b),(S2a) CN7112(WR2a) CN3102(WR2b) CN7103(WR2c),(WR2d)	<Note2a> <Note2b>
[3]	Mechanism assembly (Drum assembly)	3-1b, 3-1c, 3-1d 3-1e	CN2001(WR3a) 3(S3a),(S3b) CN(WR3b) (S3c),(S3d),(S3e)	<Note2a> <Note3a> <Note3b>
[4]	DVD unit (Bracket)	3-1d 3-1e	4(S4a),4(S4b) (WR4a),(WR4b)	<Note2a>
[5]	Digital board assembly	3-1d 3-1e	4(S5a) CN7106(WR5a),CN7108 (CN1001),CN7109(CN1002)	<Note2a>
[6]	Jack board assembly	3-1d	(S6a),CN4104(CN1801)	
[7]	Junction board assembly	3-1d 3-1e	(S7a),CN7104(WR7a), CN3103(WR7b),CN2601 (WR7c),CN7107(WR7d), CN5304(WR7e)	<Note2a>
[8]	Regulator board assembly	3-1d 3-1e	4(S8a) CN5301(WR8a), CN5302(WR8b)	<Note2a>
[9]	Rear cover	3-1d	(S9a),9(S9b),2(S9c),3(L9a)	
[10]	Main board assembly	3-1d	4(S10a)	
[11]	Tuner board assembly	3-1d 3-1e	CN6001(WR11a),CN6003 (WR11b),CN6002(WR11c)	
[12]	SECAM board assembly (EF model)	3-1d 3-1e	CN7119(WR12a) CN504(WR12b)	

<Note 2a>
- Be careful not to damage the connector and wire etc. during connection and disconnection.
- When connecting the flat wire to the connector, be careful with the flat wire direction.

<Note 2b>
- When reattaching the Front panel assembly, make sure that the door opener of the Side frame (R) is lowered in position prior to the reinstallation.
- When reattaching the Front panel assembly, pay careful attention to the switch lever of the Front panel assembly not to make it touch the switch knob of the Main board assembly from the side.
- When reattaching the Front panel assembly, lift the Cassette door slightly.

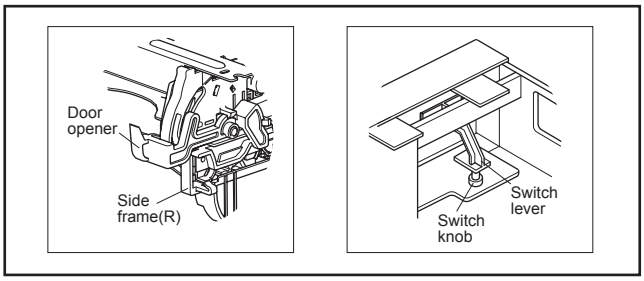


Fig.3-1a

<Note 3a>

- When reattaching the Mechanism assembly, secure the screws (S3a to S3b) in the order of 1,2,3.
- When reattaching the Mechanism assembly, be sure to align the phase of the Rotary encoder on the Main board assembly.
- When reattaching the Mechanism assembly, set the “Mechanism assembling mode”. [See “MECHANISM ASSEMBLY SERVICE MANUAL (No. 86700)”.]
- When reattaching the Mechanism assembly to the Main board assembly, take care not to damage the sensors and switch on the Main board assembly.

<Note 3b>

- When reattaching the Drum assembly, secure the screws (S3c to S3e) in the order of c, d, e.

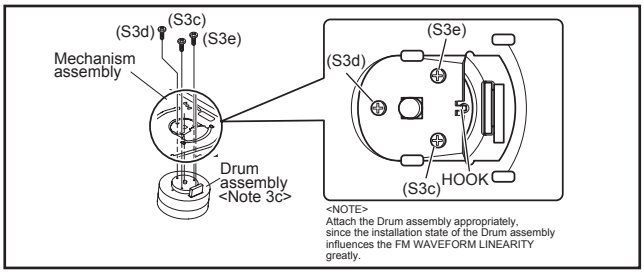


Fig.3-1b

- When handling the drum assembly alone, hold it by the motor or shaft. Be careful not to touch other parts, especially the video heads. Also take care not to damage the connectors.

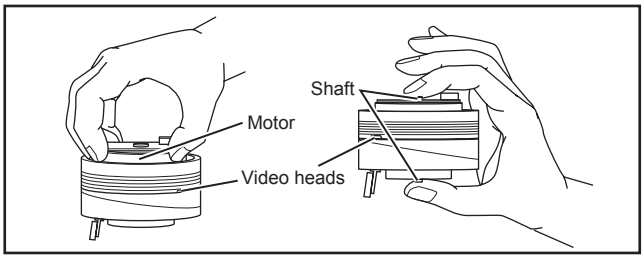


Fig.3-1c

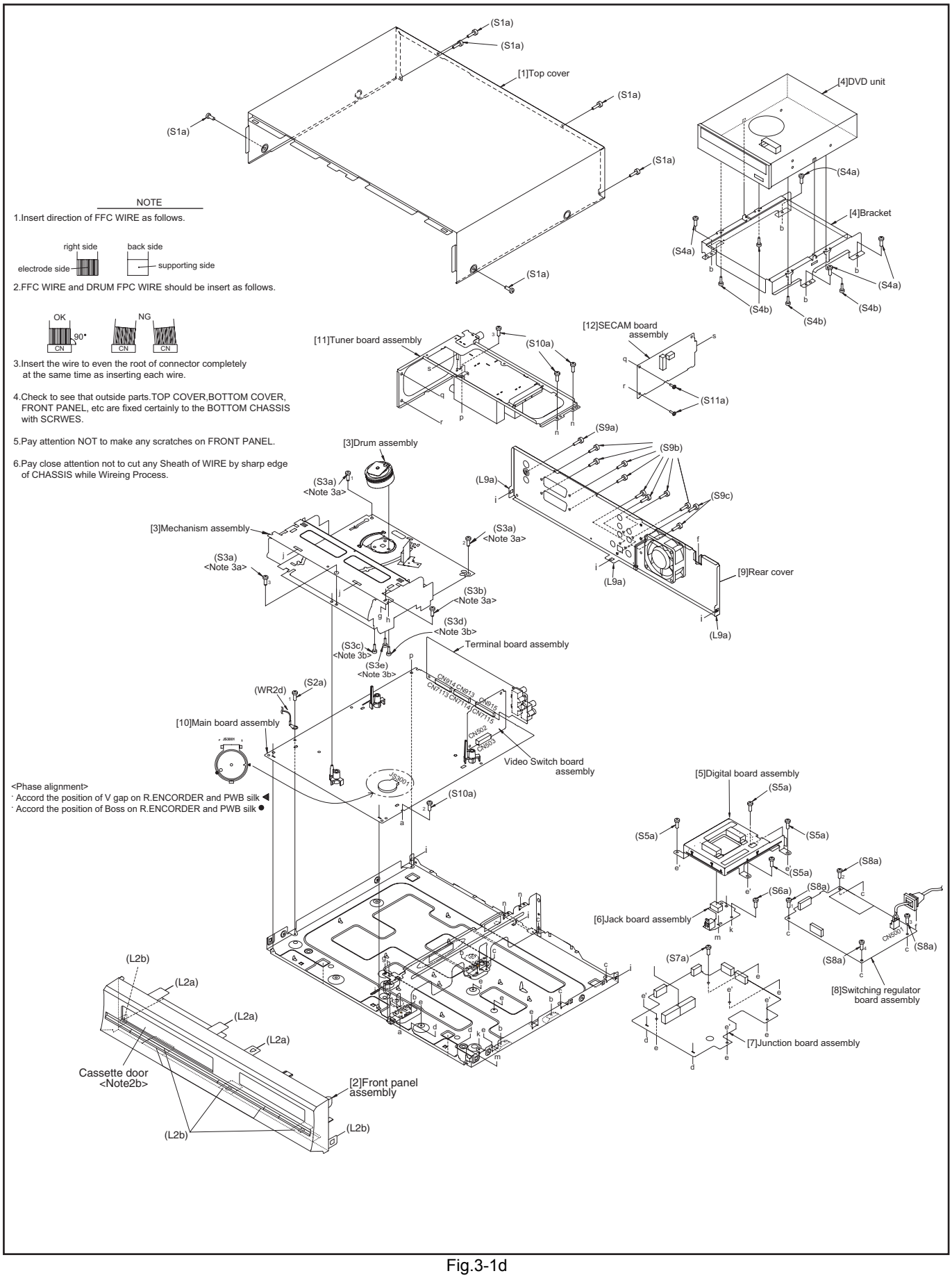

(S1a)
(S1a)
[1]Top cover
(S1a)
(S1a)
(S1a)
(S1a)
[4]DVD unit
(S4a)
[4]Bracket
(S4a)
(S4a)
(S4b)
(S4b)
(S4b)
NOTE
1.Insert direction of FFC WIRE as follows.
right side
back side
electrode side
supporting side
2.FFC WIRE and DRUM FPC WIRE should be insert as follows.
OK
NG
90°
CN
CN
CN
3.Insert the wire to even the root of connector completely at the same time as inserting each wire.
4.Check to see that outside parts.TOP COVER,BOTTOM COVER, FRONT PANEL, etc are fixed certainly to the BOTTOM CHASSIS with SCRWES.
5.Pay attention NOT to make any scratches on FRONT PANEL.
6.Pay close attention not to cut any Sheath of WIRE by sharp edge of CHASSIS while Wireing Process.
[11]Tuner board assembly
(S10a)
[12]SECAM board assembly
(S11a)
[3]Drum assembly
(S3a) <Note 3a>
[3]Mechanism assembly
(S3a) <Note 3a>
(S3a) <Note 3a>
(S3b) <Note 3a>
(S3d) <Note 3b>
(S3c) <Note 3b>
(S3e) <Note 3b>
Terminal board assembly
(WR2d)
(S2a)
[10]Main board assembly
Video Switch board assembly
(S10a)
(S9a)
(S9b)
(L9a)
(S9c)
(L9a)
[9]Rear cover
(L9a)
[5]Digital board assembly
(S5a)
(S5a)
(S5a)
(S5a)
(S6a)
[6]Jack board assembly
(S8a)
(S8a)
(S8a)
(S8a)
[8]Switching regulator board assembly
(S7a)
[7]Junction board assembly
<Phase alignment>
· Accord the position of V gap on R.ENCORDER and PWB silk ◀
· Accord the position of Boss on R.ENCORDER and PWB silk ●
(L2b)
(L2a)
(L2a)
(L2a)
Cassette door <Note2b>
[2]Front panel assembly
(L2b)
(L2b)

Fig.3-1d

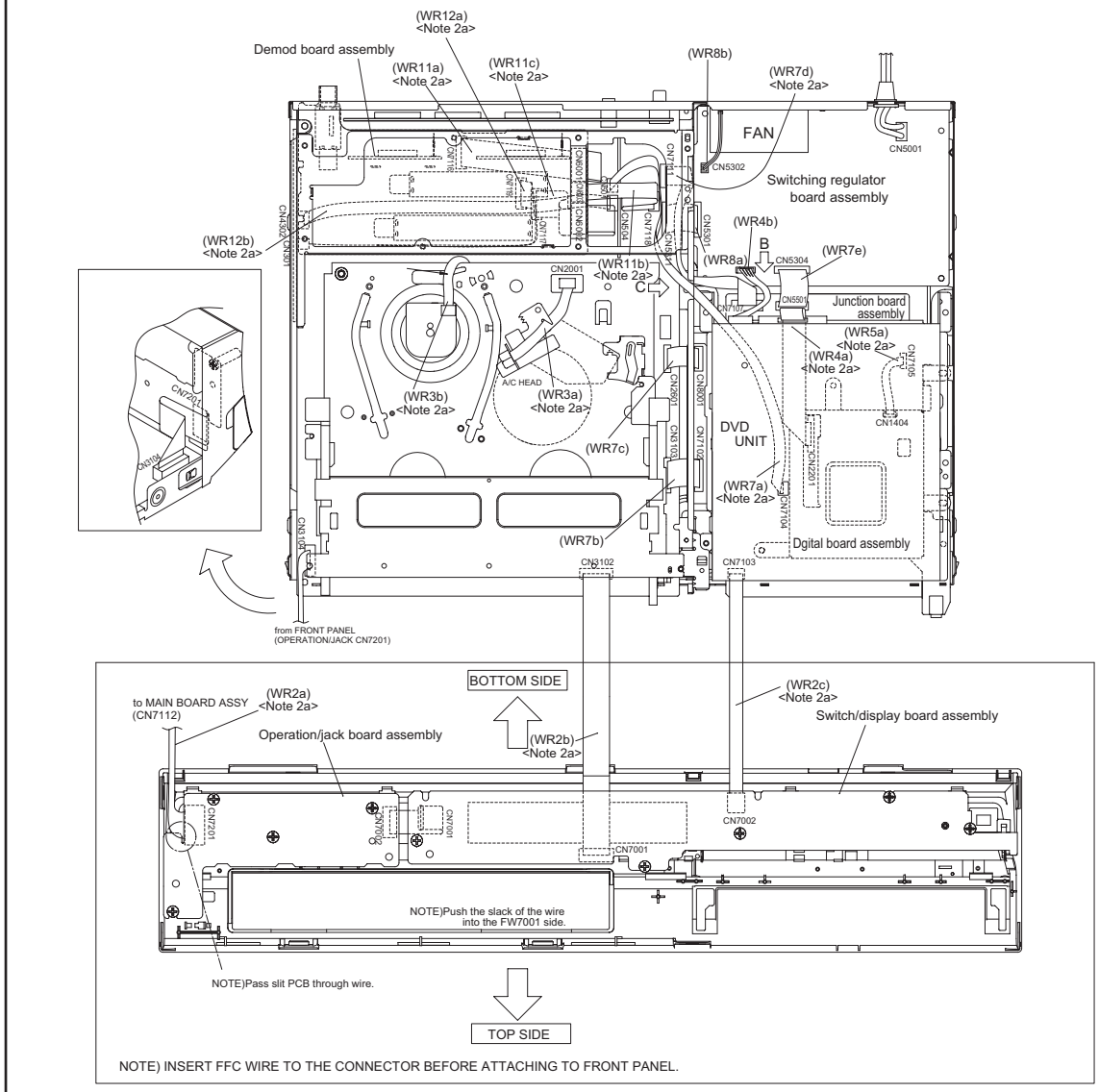

(WR12a)
<Note 2a>
Demod board assembly
(WR11a)
<Note 2a>
(WR11c)
<Note 2a>
(WR8b)
(WR7d)
<Note 2a>
FAN
CN5001
CN5302
Switching regulator
board assembly
(WR12b)
<Note 2a>
(WR4b)
B
(WR8a)
CN5304
(WR7e)
CN2001
(WR11b)
<Note 2a>
C
CN5501
Junction board
assembly
(WR5a)
<Note 2a>
(WR4a)
<Note 2a>
A/C HEAD
(WR3b)
<Note 2a>
(WR3a)
<Note 2a>
CN1404
DVD
UNIT
(WR7c)
(WR7a)
<Note 2a>
(WR7b)
Dgital board assembly
CN7103
CN3102
from FRONT PANEL
(OPERATION/JACK CN7201)
BOTTOM SIDE
to MAIN BOARD ASSY
(CN7112)
(WR2a)
<Note 2a>
Operation/jack board assembly
(WR2b)
<Note 2a>
(WR2c)
<Note 2a>
Switch/display board assembly
CN7002
CN7001
NOTE)Push the slack of the wire
into the FW7001 side.
NOTE)Pass slit PCB through wire.
TOP SIDE
NOTE) INSERT FFC WIRE TO THE CONNECTOR BEFORE ATTACHING TO FRONT PANEL.
BRACKET(CENTER)
CN7111
MAIN BOARD ASSY
DRAWING FROM DIRECTION C
NOTE) FJ CONN should be insert as follows.
OK
NG
CN7102 ~ CN3103
CN8001 ~ CN2601
CN5501 ~ CN5304
CN5311 ~ CN5301
NOTE) Push both ends of connector
when it is inserted to the DRIVE UNIT.
DRAWING FROM DIRECTION B
NOTE) Replace the attached FITING.
<HOW TO REMOVE>
FITTING(DVD) ASSY
TRAY
Take it out up
by doing the slide.
It pulls out toward
front side.

Fig.3-1e

SECTION 4
ADJUSTMENT

4.1 Before adjustment

4.1.1 Precaution

- **The adjustments of this unit include the mechanism compatibility and electrical adjustments. During the performance of this work, be sure to observe the precautions for each type of adjustment.**
- **If there is a reference to a signal input method in the signal column of the adjustment chart, "Ext. S-input" means the Y/C separated video signal and "Ext. input" means the composite video signal input.**
- **Unless otherwise specified, all measuring points and adjustment parts are located on the Main board.**

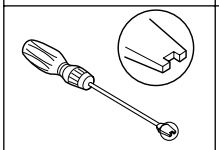
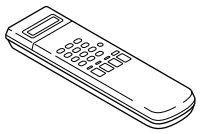
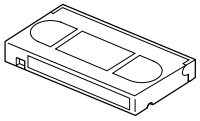
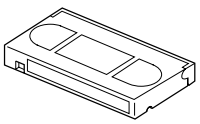
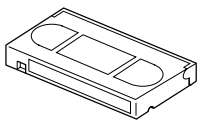
4.1.2 Required test equipments

- Color (colour) television or monitor
- Oscilloscope: wide-band, dual-trace, triggered delayed sweep
- Signal generator: RF / IF sweep / marker
- Signal generator: stairstep, color (colour) bar [PAL]
- Recording tape
- Digit-key remote controller(provided)

4.1.3 Required adjustment tools

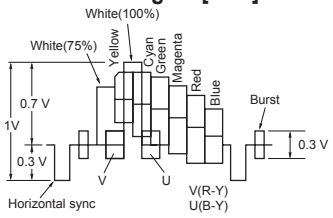
● : Used --- : Not used

	Mechanism compatibility adjustment	Electrical adjustment
Roller driver	●	---
Jig RCU	---	●
Back tension cassette gauge	●	---
Alignment tape(MHPE)	●	---
Alignment tape(MHPE-L)	●	●

Roller driver PTU94002	Jig RCU PTU94023B	Back tension cassette gauge PUJ48076-2
		
Alignment tape (SP, stairstep, PAL) MHPE	Alignment tape (LP, stairstep, PAL) MHPE-L	
		

4.1.4 Color (colour) bar signal,Color (colour) bar pattern

• Colour bar signal [PAL]



• Colour bar pattern [PAL]

(75%)

White	Yellow	Cyan	Green	Magenta	Red	Blue
V	U	White 100%			Black	

4.1.5 Switch settings

When adjusting this unit, set the VCR mode and switches as described below.

- When using the Jig RCU, it is required to set the VCR to the Jig RCU mode (the mode in which codes from the Jig RCU can be received). (See "section 2 SPECIFIC SERVICE INSTRUCTIONS".)

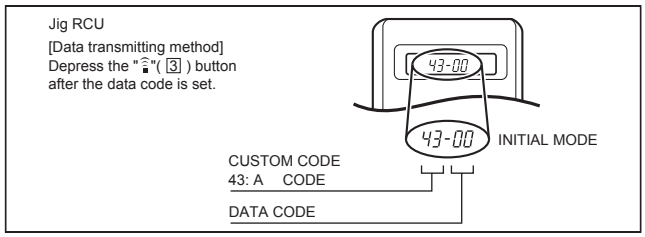


Fig.4-1a Jig RCU [PTU94023B]

- Set the switches as shown below unless otherwise specified on the relevant adjustment chart. The switches that are not listed below can be set as desired.
  If the VCR is not equipped with the functions detailed below, setup is not required.

AUTO PICTURE/VIDEO CALIBRATION/ B.E.S.T./D.S.P.C.	OFF
PICTURE CONTROL/SMART PICTURE	NORMAL/NATURAL
VIDEO STABILIZER	OFF
TBC	ON
Digital 3R	ON
VIDEO NAVIGATION/TAPE MANAGER	OFF
BLUE BACK	OFF

4.1.6 Manual tracking mode (Auto tracking ON/OFF) setting

(1) In order to set to the manual tracking mode during tape playback, press the "SP/EP(LP)"button on the remote control unit.
  - Each press of the button switches the auto tracking ON or OFF.
  - When the manual tracking mode is set, the tracking is placed at the center position.

(2) Press "channel +/-" to adjust the tracking manually.

4.1.7 EVR Adjustment

Some of the electrical adjustments require the adjustment performed by the EVR system. The main unit have EEPROMs for storing the EVR adjustment data and user setups.

Notes:

- **In the EVR adjustment mode, the value is varied with the channel buttons (+, -). The adjusted data is stored when the setting mode changes (from PB to STOP, when the tape speed is changed, etc.). Take care to identify the current mode of each adjustment item when making an adjustment.**
- **When changing the address setting in the EVR adjustment mode, use the Jig RCU or the remote controller having numeric keypad with which a numeric code can be directly input.**
  The remote control code of the Jig RCU corresponds to each of the digit keys on the remote controller as follows.

Digit-key	0	1	2	3	4	5	6	7	8	9
Code	20	21	22	23	24	25	26	27	28	29

- **As the counter indication and remaining tape indication are not displayed FDP during the EVR adjustment mode, check them on the TV monitor screen.**
- **When performing the EVR adjustment, confirm that the FDP indication is changed to the EVR mode, as shown below.**

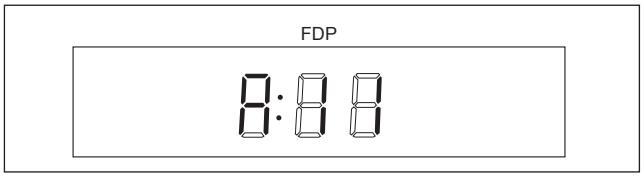


Fig.4-1b EVR mode

4.2 Mechanism compatibility adjustment

Notes:

- **Although compatibility adjustment is very important, it is not necessary to perform this as part of the normal servicing work. It will be required when you have replaced the A/C head, drum assembly or any part of the tape transport system.**
- **To prevent damaging the alignment tape in the compatibility adjustment, prepare a cassette tape (for self-recording/playback), perform a test on it by transporting it and making sure that the tape is not bent by the tape transport mechanisms such as in the guide rollers.(See Fig.4-2b.)**

4.2.1 Tension pole position

Notes:

- **This adjustment must be performed every time the tension band is replaced.**

Signal	(A)	• Back tension cassette gauge [PUJ48076-2]
Mode	(B1) (B2)	• PB • Eject end
Adjustment part	(F)	• Adjust pin [Mechansim assembly]
Specified value	(G)	• 25 - 51 gf•cm (2.45 - 5 x 10^{-3} Nm)

(1) Play back the back tension cassette gauge (A).
(2) Check that the indicated value on the left side gauge is within the specified value (G).
(3) If the indicated value is not within the specified value (G), perform the adjustment in a following procedure.(See Fig.4-2a.)
   a) Remove the top frame, cassette holder and side frames (L/R) all together. (Refer to the SERVICE MANUAL No.86700 [MECHANISM ASSEMBLY].)
   b) Rotate the loading motor gear to move the control plate so that the triangular stamping to the left of the “P”stamping is aligned with the stamping (a) on the main deck. This positioning is mode (B1).
   c) Adjust by turning the adjustment pin so that the tip of the tension arm is aligned with the stamping (b) on the main deck.
   d) Rotate the reel disk (S) by about one turn clockwise and make sure that the round hole of the adjustment pin is located in the “OK” range. If it is outside this range, restart the adjustment from the beginning.

   After completion of the adjustment, rotate the loading gear motor to return it to the mode (B2) position.

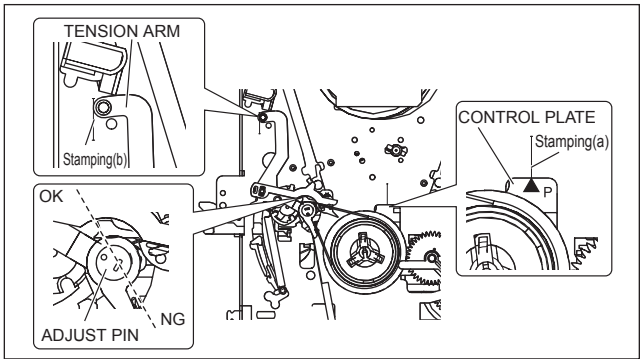


Fig.4-2a

4.2.2 FM waveform linearity

Signal	(A1) (A2)	• Alignment tape(SP, stairstep, PAL) [MHPE] • Alignment tape(LP, stairstep, PAL) [MHPE-L]
Mode	(B)	• PB
Equipment	(C)	• Oscilloscope
Measuring point	(D)	• TP106 (PB. FM)
External trigger	(E)	• TP111 (D.FF)
Adjustment part	(F)	• Guide roller [Mechanism assembly]
Specified value	(G)	• Flat V.PB FM waveform
Adjustment tool	(H)	• Roller driver [PTU94002]

(1) Play back the alignment tape (A1).
(2) Apply the external trigger signal to D.FF (E), to observe the V.PB FM waveform at the measuring point (D).
(3) Set the VCR to the manual tracking mode.
(4) Make sure that there is no significant level drop of the V.PB FM waveform caused by the tracking operation, with its generally parallel and linear variation ensured. Perform the following adjustments when required. (See Fig. 4-2c.)
(5) Reduce the V.PB FM waveform by the tracking operation. If a drop in level is found on the left side, turn the guide roller of the pole base assembly (supply side) with the roller driver to make the V.PB FM waveform linear.
   If a drop in level is on the right side, likewise turn the guide roller of the pole base assembly (take-up side) with the roller driver to make it linear. (See Fig. 4-2c.)
(6) Make sure that the V.PB FM waveform varies in parallel and linearly with the tracking operation again. When required, perform fine-adjustment of the guide roller of the pole base assembly (supply or take-up side).
(7) Unload the cassette tape once, play back the alignment tape (A1) again and confirm the V.PB FM waveform.
(8) After adjustment, confirm that the tape wrinkling does not occur at the roller upper or lower limits. (See Fig. 4-2b.) [Perform adjustment step (9) only for the models equipped with SP mode and EP (or LP) mode.]

   [Perform adjustment step (9) only for the models equipped with SP mode and EP (or LP) mode.]
(9) Repeat steps (1) to (8) by using the alignment tape (A2).

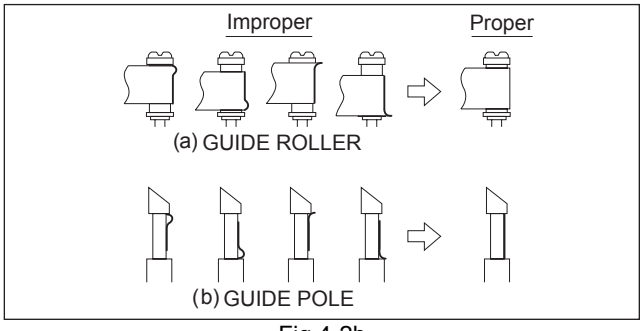


Fig.4-2b

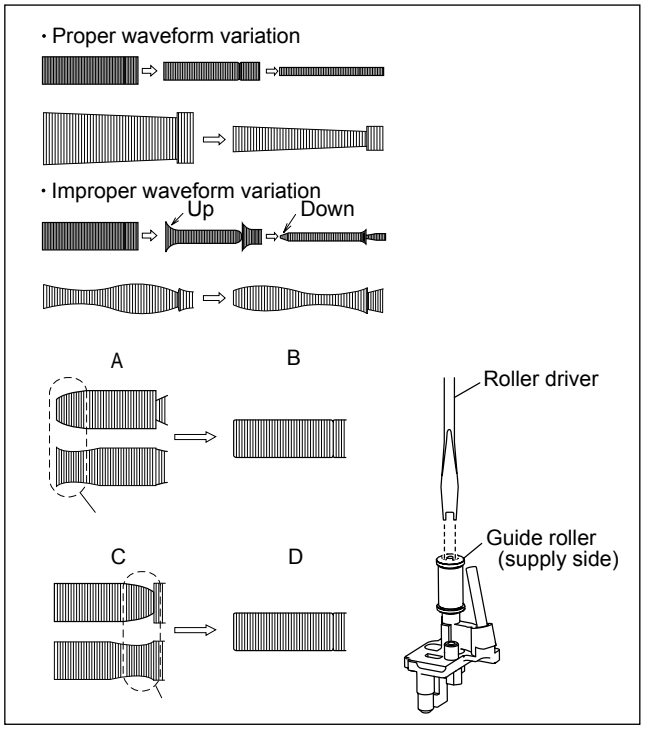


Fig.4-2c

4.2.3 Height and tilt of the A/C head

Note:

- **Set a temporary level of the height of the A/C head in advance to make the adjustment easier after the A/C head has been replaced. (Refer to the SERVICE MANUAL No.86700 [MECHANISM ASSEMBLY].)**

Signal	(A)	• Alignment tape(SP, stairstep, PAL) [MHPE]
Mode	(B)	• PB
Equipment	(C)	• Oscilloscope
Measuring point	(D1) (D2)	• TP106 (PB. FM) • TP4001 (CTL. P)
External trigger	(E)	• TP111 (D.FF)
Adjustment part	(F)	• A/C head [Mechanism assembly]
Specified value	(G)	• Maximum waveform

(1) Play back the alignment tape (A).
(2) Apply the external trigger signal to D.FF (E), to observe the AUDIO OUT waveform and Control pulse waveform at the measuring points (D1) and (D2) in the ALT mode.
(3) Set the VCR to the manual tracking mode.
(4) Adjust the AUDIO OUT waveform and Control pulse waveform by turning the screws (1), (2) and (3) little by little until both waveforms reach maximum. The screw (1) and (3) are for adjustment of tilt and the screw (2) for azimuth.

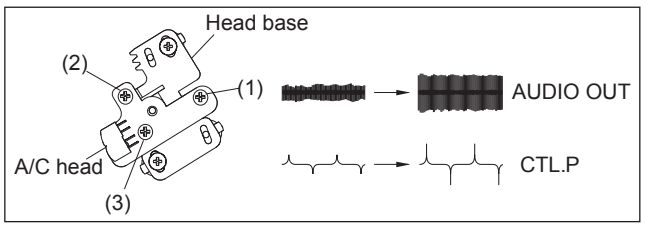


Fig.4-2d

4.2.4 A/C head phase (X-value)

Signal	(A1) (A2)	• Alignment tape(SP, stairstep, PAL) [MHPE] • Alignment tape(LP, stairstep, PAL) [MHPE-L]
Mode	(B)	• PB
Equipment	(C)	• Oscilloscope
Measuring point	(D)	• TP106 (PB. FM)
External trigger	(E)	• TP111 (D.FF)
Adjustment part	(F)	• A/C head base [Mechanism assembly]
Specified value	(G)	• Flat V.PB FM waveform
Adjustment tool	(H)	• Roller driver [PTU94002]

(1) Play back the alignment tape (A1).
(2) Apply the external trigger signal to D.FF (E), to observe the V.PB FM waveform at the measuring point (D).
(3) Set the VCR to the manual tracking mode.
(4) Loosen the screws (4) and (5), then set the Roller driver to the innermost projected part of the A/C head. (See Fig. 4-2e.)
(5) Rotate the roller driver so that the A/C head comes closest to the capstan. From there, move the A/C head back gradually toward the drum until the point where the FM waveform is maximized for the second time, and then tighten the screws (4) and (5) temporarily.
(6) Play an alignment tape (A2) and set to the manual-tracking mode.
(7) Fine-adjust A/C head base position to maximize the FM waveform, and then tighten the screws (4) and (5) firmly.
(8) Play alignment tapes (A1) and (A2) and confirm that the FM waveforms are maximized when the tracking is at the center position.

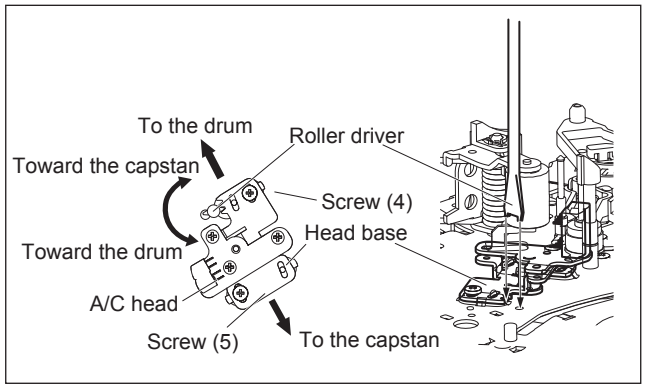


Fig.4-2e

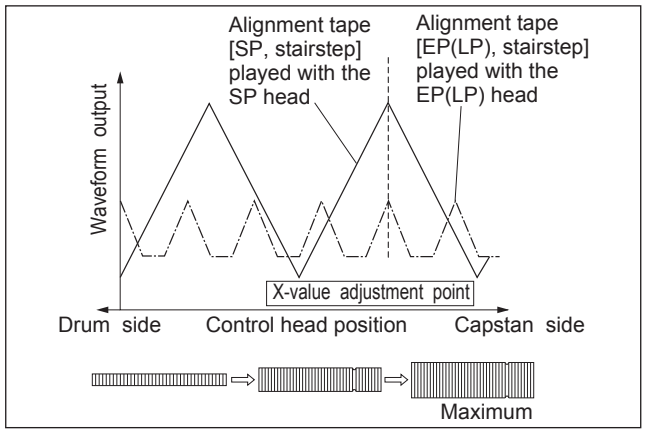


Fig.4-2f

4.3 Electrical adjustment

Note:

The following adjustment procedures are not only necessary after replacement of consumable mechanical parts or board assemblies, but are also provided as references to be referred to when servicing the electrical circuitry.

In case of trouble with the electrical circuitry, always begin a service by identifying the defective points by using the measuring instruments as described in the following electrical adjustment procedures. After this, proceed to the repair, replacement and/or adjustment. If the required measuring instruments are not available in the field, do not change the adjustment parts (variable resistor, etc.) carelessly.

4.3.1 Servo circuit

4.3.1.1 Switching point

Signal	(A1) (A2)	• Stairstep signal • Alignment tape(LP, stairstep, PAL) [MHPE-L]
Mode	(B)	• PB
Equipment	(C)	• Oscilloscope
Measuring point	(D)	• VIDEO OUT terminal (75 ohm terminated) • TP106 (PB. FM)
External trigger	(E)	• TP111 (D.FF)
Adjustment part	(F)	• Jig RCU: Code “5A”
Specified value	(G)	• 6.5 ± 0.5H
Adjustment tool	(H)	• Jig RCU [PTU94023B]

(1) Play back the signal (A1) of the alignment tape (A2).
(2) Apply the external trigger signal to D.FF (E) to observe the VIDEO OUT waveform and V.PB FM waveform at the measuring points (D1) and (D2).
(3) Set the VCR to the manual tracking mode.
(4) Adjust tracking so that the V.PB FM waveform becomes maximum.
(5) Set the VCR to the Auto adjust mode by transmitting the code (F) from the Jig RCU. When the VCR enters the stop mode, the adjustment is completed.
(6) If the VCR enters the eject mode, repeat steps (1) to (5) again.
(7) Play back the alignment tape (A2) again, confirm that the switching point is the specified value (G).

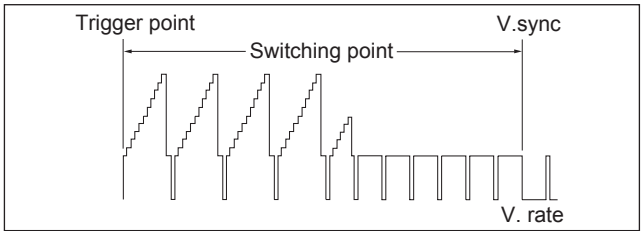


Fig.4-3a Switching point

4.3.1.2 Slow tracking preset

Signal	(A1) (A2)	• Ext. input • Color (colour) bar signal [PAL]
Mode	(B1) (B2)	• VHS SP • VHS LP
Measuring point	(D)	• TV-Monitor
Adjustment part	(F)	• Jig RCU: Code “71”or “72”
Specified value	(G)	• minimum noise
Adjustment tool	(H)	• Jig RCU [PTU94023B]

(1) Record the signal (A2) in the mode (B1), and play back the recorded signal.
(2) Set the VCR to the manual tracking mode.
(3) Set the VCR to the FWD slow (+1/6x) mode.
(4) Transmit the code (F) from the Jig RCU to adjust so that the noise bar becomes the specified value (G) on the TV monitor in the slow mode.
(5) Set the VCR to the Stop mode.
(6) Confirm that the noise bar is (G) on the TV monitor in the slow mode.
(7) Repeat steps (3) to (6) in the REV slow (+1/6x) mode.
(8) Repeat steps (1) to (7) in the mode (B2).

Note:

- **For FWD slow (+1/6x) playback, transmit the code “08” from the Jig RCU to enter the slow playback mode, and transmit the code “D0”for REV slow (-1/6x) mode.**

4.3.2 DVD Video circuit

Note

- **When perform these adjustments, set the unit to DVD mode.(DVD lamp lights up)**

4.3.2.1 EE Composite Y level

Signal	(A)	• Internal colour bar
Mode	(B)	• EE
Equipment	(C)	• Oscilloscope
Measuring point	(D)	• L-1 connector pin19
EVR mode EVR address	(F1) (F2) (F3) (F4) (F5)	• Jig code “95” • "ADJUST01 : **" • Jig code “21” • Jig code “18” or “19” (Channel +/-) • Jig code “3C”
Specified value	(G)	• 1.00 ± 0.02 Vp-p (terminated)
Adjustment tool	(H)	• Jig RCU [PTU94023B]

(1) Observe the V OUT waveform at the measuring point (D).
(2) Set the VCR to the EVR mode by transmitting the code (F1) from the Jig RCU.
(3) Set the EVR address to (F2) by transmitting the code (F3) from the Jig RCU.
(4) Transmit the code (F4) from the Jig RCU to adjust so that the Y level of the V OUT waveform becomes the specified value (G).
(5) Release the EVR mode of the VCR by transmitting the code (F5) from the Jig RCU again. (When the EVR mode is released, the adjusted data is memorized.)

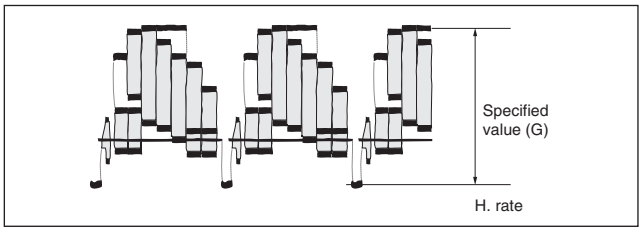


Fig.4-3b EE composite Y level

4.3.2.2 EE Y level

Signal	(A1) (A2)	• Ext. input • Color (colour) bar signal
Mode	(B)	• EE
Equipment	(C)	• Oscilloscope
Measuring point	(D)	• L-1 connector pin19
EVR mode EVR address	(F1) (F2) (F3) (F4) (F5)	• Jig code “95” • "ADJUST02 : **" • Jig code “22” • Jig code “18” or “19” (Channel +/-) • Jig code “3C”
Specified value	(G)	• 1.00 ± 0.02 Vp-p (terminated)
Adjustment tool	(H)	• Jig RCU [PTU94023B]

(1) Observe the V OUT waveform at the measuring point (D).
(2) Set the VCR to the EVR mode by transmitting the code (F1) from the Jig RCU.
(3) Set the EVR address to (F2) by transmitting the code (F3) from the Jig RCU.
(4) Transmit the code (F4) from the Jig RCU to adjust so that the Y level of the V OUT waveform becomes the specified value (G).
(5) Release the EVR mode of the VCR by transmitting the code (F5) from the Jig RCU again. (When the EVR mode is released, the adjusted data is memorized.)

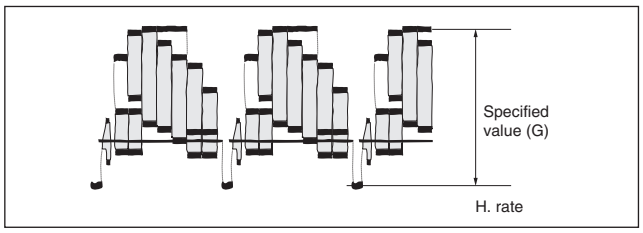


Fig.4-3c EE Y level

4.3.2.3 EE composite burst level

Signal	(A)	• Internal colour bar
Mode	(B)	• EE
Equipment	(C)	• Oscilloscope
Measuring point	(D)	• L-1 connector pin19
EVR mode EVR address	(F1) (F2) (F3) (F4) (F5)	• Jig code “95” • "ADJUST00 : **" • Jig code “20” • Jig code “18” or “19” (Channel +/-) • Jig code “3C”
Specified value	(G)	• 0.30 ± 0.01 Vp-p (terminated)
Adjustment tool	(H)	• Jig RCU [PTU94023B]

(1) Observe the V OUT waveform at the measuring point (D).
(2) Set the VCR to the EVR mode by transmitting the code (F1) from the Jig RCU.
(3) Set the EVR address to (F2) by transmitting the code (F3) from the Jig RCU.
(4) Transmit the code (F4) from the Jig RCU to adjust so that the burst level of the V OUT waveform becomes the specified value (G).
(5) Release the EVR mode of the VCR by transmitting the code (F5) from the Jig RCU again. (When the EVR mode is released, the adjusted data is memorized.)

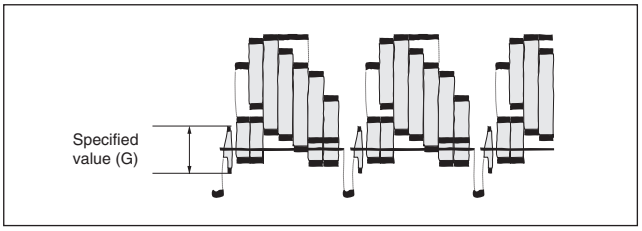


Fig.4-3d EE composite burst level

4.3.2.4 EE R/G/B level

Signal	(A)	• Internal colour bar
Mode	(B)	• EE
Equipment	(C)	• Oscilloscope
Measuring point	(D1) (D2) (D3)	• L-1 connector pin15(R) • L-1 connector pin11(G) • L-1 connector pin7(B)
EVR mode EVR address	(F1) (F2) (F3) (F4) (F5)	• Jig code “95” • "ADJUST05 : **" • Jig code “25” • Jig code “18” or “19” (Channel +/-) • Jig code “3C”
Specified value	(G)	• 0.70 ± 0.02 Vp-p (terminated)
Adjustment tool	(H)	• Jig RCU [PTU94023B]

(1) Observe the R OUT waveform at the measuring point (D1).
(2) Set the VCR to the EVR mode by transmitting the code (F1) from the Jig RCU.
(3) Set the EVR address to (F2) by transmitting the code (F3) from the Jig RCU.
(4) Transmit the code (F4) from the Jig RCU to adjust so that the R level of the R OUT waveform becomes the specified value (G).
(5) Release the EVR mode of the VCR by transmitting the code (F5) from the Jig RCU again. (When the EVR mode is released, the adjusted data is memorized.)
(6) Observe the G OUT waveform at the measuring point (D2).
(7) Repeat steps (2) to (5) above.
(8) Observe the B OUT waveform at the measuring point (D3).
(9) Repeat steps (2) to (5) above.

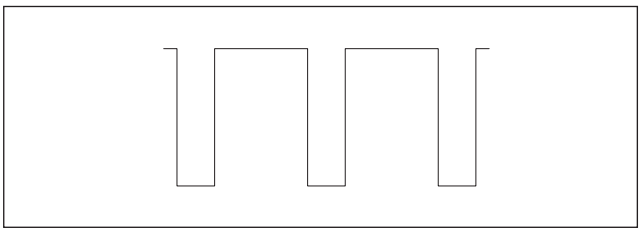


Fig.4-3e EE R/G/B level

4.3.2.5 EE COMPONENT PB/CB level

Signal	(A)	• Internal colour bar
Mode	(B)	• EE
Equipment	(C)	• Oscilloscope
Measuring point	(D)	• COMPONENT PB/CB terminal
EVR mode EVR address	(F1) (F2) (F3) (F4) (F5)	• Jig code “95” • "ADJUST06 : **" • Jig code “26” • Jig code “18” or “19” (Channel +/-) • Jig code “3C”
Specified value	(G)	• 0.70 ± 0.02 Vp-p (terminated)
Adjustment tool	(H)	• Jig RCU [PTU94023B]

(1) Observe the CB OUT waveform at the measuring point (D).
(2) Set the VCR to the EVR mode by transmitting the code (F1) from the Jig RCU.
(3) Set the EVR address to (F2) by transmitting the code (F3) from the Jig RCU.
(4) Transmit the code (F4) from the Jig RCU to adjust so that the CB level of the CB OUT waveform becomes the specified value (G).
(5) Release the EVR mode of the VCR by transmitting the code (F5) from the Jig RCU again. (When the EVR mode is released, the adjusted data is memorized.)

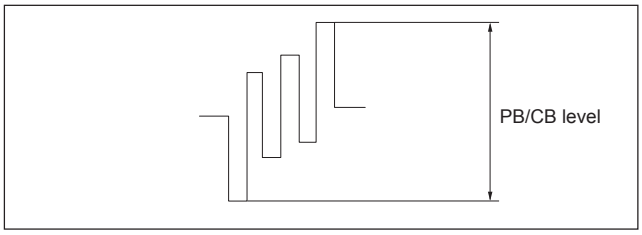


Fig.4-3f EE component PB/CB level

4.3.3 Syscon circuit

4.3.3.1 Timer clock

Signal	(A)	• No signal
Mode	(B)	• EE
Equipment	(C)	• Frequency counter
Measuring point	(D1)	• IC3301 pin 61
	(D2)	• IC3301 pin 18
	(D3)	• C3326 + and -
Adjustment part	(F)	• C3025 (TIMER CLOCK)
Specified value	(G)	• 1024.020 ± 0.020 Hz (976.5434 ± 0.0200 usec)

(1) Connect the frequency counter to the measuring point (D1).
(2) Connect the short wire between the short point (D2) and Vcc (5V).
(3) Short the leads of capacitor (D3) once in order to reset the microprocessor of the Syscon.
(4) Disconnect the short wire between the short point (D2) and Vcc then connect it again.
(5) Adjust the Adjustment part (F) so that the output frequency becomes the specified value (G).

SECTION 5
TROUBLESHOOTING

5.1 Manually removing the cassette tape

If you cannot remove the cassette tape which is loaded because of any electrical or mechanical failures, manually remove it by taking the following steps.

(1) Unplug the power cord plug from the power outlet.

(2) Refer to the disassembly procedure of the VCR and perform the disassembly of the major parts before removing the mechanism assembly. (See Fig. 5-1a)

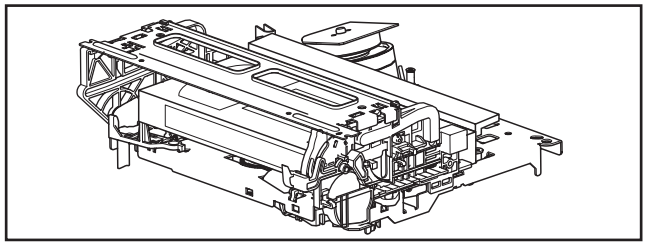


Fig.5-1a

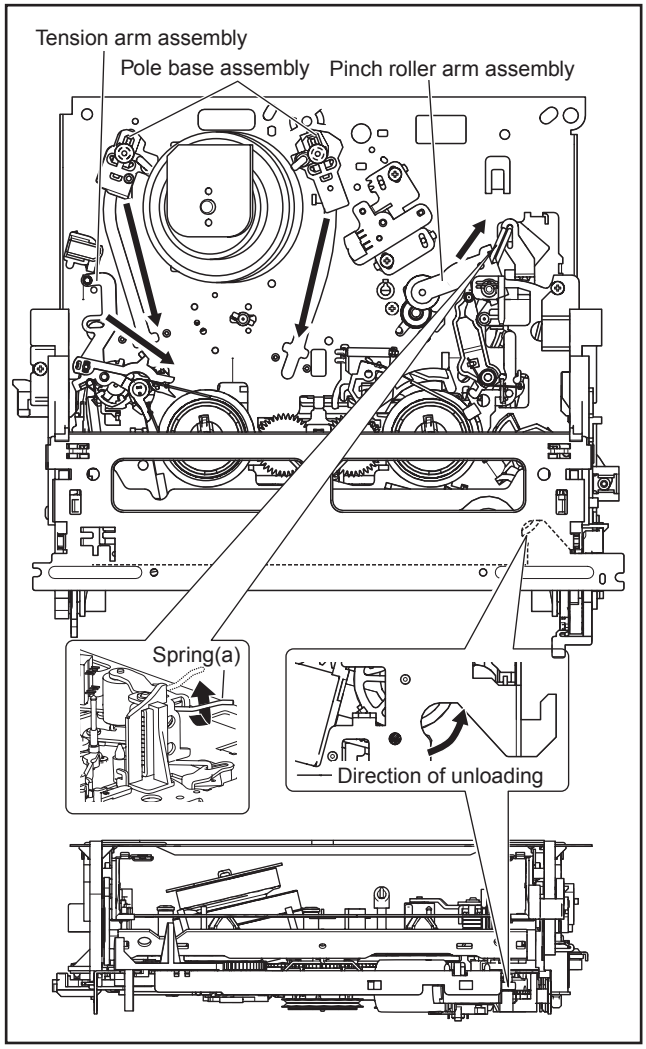


Fig.5-1b

(3) Unload the pole base assembly by manually turning the gear of the loading motor until the pole base assembly is hidden behind the cassette lid. In doing so, hold the tape by the hand to keep the slack away from any grease. (See Fig.5-1b)

In case of mechanical failures, while keeping the tension arm assembly free from tension, pull out the tape on the pole base assembly. Take the spring(a) of the pinch roller arm assembly off the hook, and detach it from the tape.

(4) Remove the screw (a) of the side frame (L/R).

(5) Hold the slack tape and cassette cover together, lift the cassette tape, top frame, cassette holder and side frames (L, R) together from the rear and remove them by dis-engaging the hooks (a) and (b).

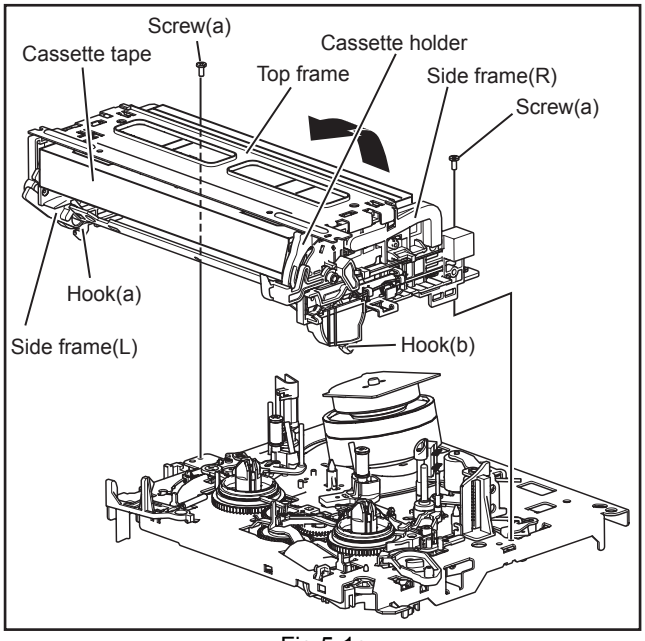


Fig.5-1c

(6) Take up the slack of the tape into the cassette. This completes removal of the cassette tape.

5.2 Manually removing the disk(DVD/CD)

If you cannot remove the disk which is loaded because of any electrical or mechanical failures, manually remove it by taking the following steps.

5.2.1 Method 1

(1) AC Plug is pulled out at once and inserted again.

(2) It is displayed on FDP as "LOADING", and while it blinks, pushing the OPEN/CLOSE button is continued.

(3) After a while, a tray opens (About 20 seconds).

(4) After removed a disk, press the OPEN/CLOSE button again to close the tray.

(5) The "LOADING" blink display of FDP disappears and it will be in a standby mode.

(6) If the POWER button is pushed, it will usually be operating.

5.2.2 Method 2

(1) Unplug the ACpower cord from the AC outlet.

(2) Remove the top cover and front panel assembly.
(Refer to the disassembly procedure and perform the disassembly of the major parts before removing)

(3) Pass a thin wire through a hole in the DVD unit.

(4) The disc tray comes out slightly. Take out the disc tray manually.(See Fig.5-2a)

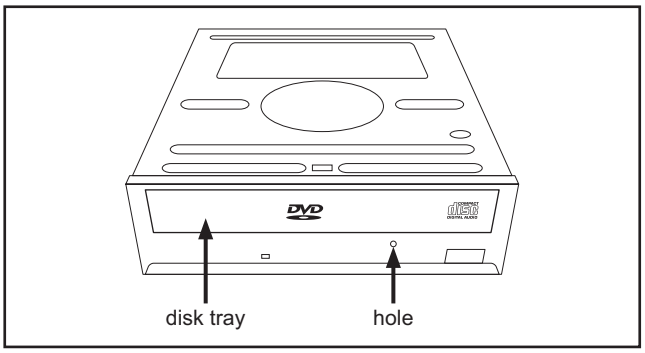


Fig.5-2a

5.3 Emergency display function (VHS SECTION)

This unit saves details of the last two emergencies as the EMG history and allows the status of the VCR and the mechanism of each emergency to be shown both on the display and as OSD information.
When using the emergency function, it is required to set the VCR to the Jig RCU mode.

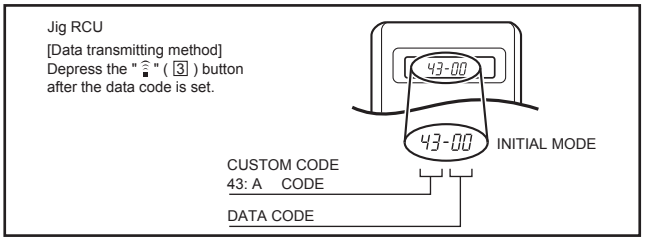


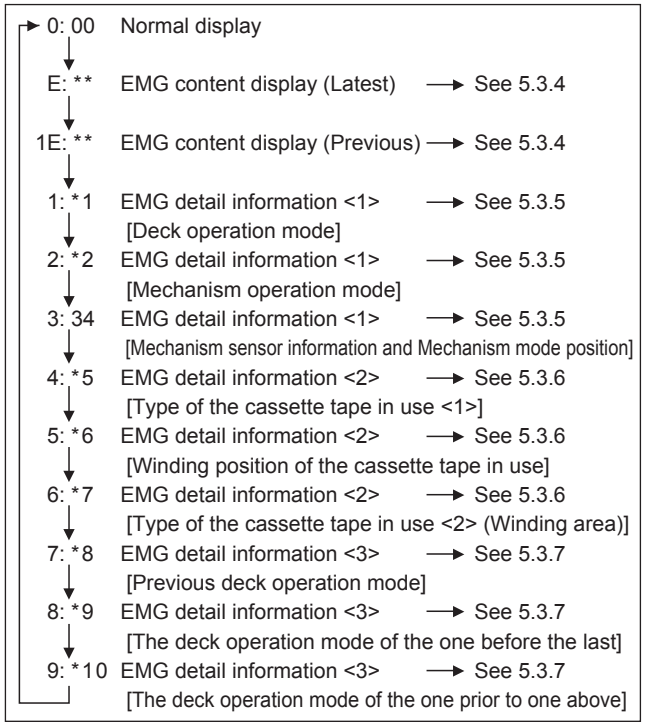
Fig.5-3a Jig RCU [PTU94023B]

5.3.1 Displaying the EMG information

The EMG detail of information can be displayed by transmitting the code "59" from the Jig RCU.

Note:

- **The EMG detail information <1><2> show the information on the latest EMG.**
  It becomes " - - : - - : - - " when there is no latest EMG record.


0: 00 Normal display
E: ** EMG content display (Latest) → See 5.3.4
1E: ** EMG content display (Previous) → See 5.3.4
1: *1 EMG detail information <1> → See 5.3.5
[Deck operation mode]
2: *2 EMG detail information <1> → See 5.3.5
[Mechanism operation mode]
3: 34 EMG detail information <1> → See 5.3.5
[Mechanism sensor information and Mechanism mode position]
4: *5 EMG detail information <2> → See 5.3.6
[Type of the cassette tape in use <1>]
5: *6 EMG detail information <2> → See 5.3.6
[Winding position of the cassette tape in use]
6: *7 EMG detail information <2> → See 5.3.6
[Type of the cassette tape in use <2> (Winding area)]
7: *8 EMG detail information <3> → See 5.3.7
[Previous deck operation mode]
8: *9 EMG detail information <3> → See 5.3.7
[The deck operation mode of the one before the last]
9: *10 EMG detail information <3> → See 5.3.7
[The deck operation mode of the one prior to one above]

EMG display of 7 FDP display model
Fig.5-3b

EMG display of FDP display mode

(1) Transmit the code “59” from the Jig RCU.
The FDP shows the EMG content in the form of “E:**:**”.

<Example 1> E : 01 ← Latest EMG

<Example 2> E : - - ← No EMG record

(2) Transmit the code “59” from the Jig RCU again.
The FDP shows the EMG detail information <1> in the form of “ *1: *2 : 34 ”.

*1 : Deck operation mode at the moment of EMG
*2 : Mechanism operation mode at the moment of EMG
3- : Mechanism sensor information at the moment of EMG
-4 : Mechanism mode position at the moment of EMG

(3) Transmit the code “59” from the Jig RCU once again.
The FDP shows the EMG detail information <2> in the form of “ *5 : *6 : *7 ”.

*5 : Type of the cassette tape in use <1> .
*6 : Winding position of the cassette tape in use
*7 : Type of the cassette tape in use <2> (Winding area)

(4) Transmit the code “59” from the Jig RCU once again.
The FDP shows the EMG detail information <3> in the form of “*8 : *9 : *10”.

*8 : Previous deck operation mode at the moment of EMG
*9 : The deck operation mode of the one before the last at the moment of EMG
*10: The deck operation mode of the one prior to one above at the moment of EMG

(5) Transmit the code “59” from the Jig RCU once again to reset the display.

5.3.2 Clearing the EMG history

(1) Display the EMG history.
(2) Transmit the code “36” from the Jig RCU.
(3) Reset the EMG display.

5.3.3 Details of the OSD display in the EMG display mode

During the EMG display, the OSD shows the data on the deck mode, etc. The details of the display contents are as follows.

Notes:

- **The display is variable depending on the part No. of the System Control microcomputer (IC3001) built into the VCR. In the following, refer to the figure carrying the same two characters as the top two characters of the part number of your IC.**
- **The sensor information in the OSD display contents is partially different from the mechanism sensor information in EMG detail information <1>.**

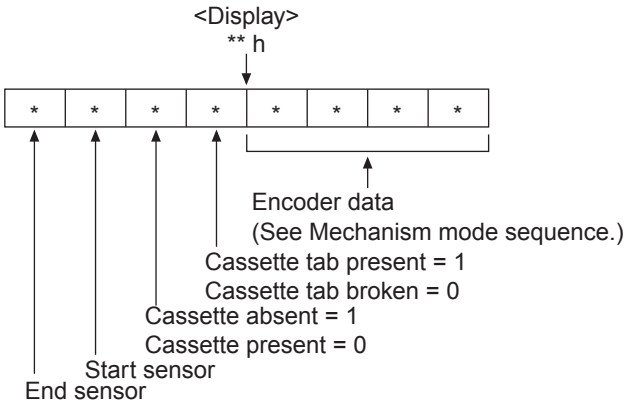
[For MN* only]

AA	BB	CC	DD	EE
FF	GG	HH	I I	J J
KK	L L	MM	NN	OO
PP	QQ	RR	SS	TT
UU	VV	WW	XX	YY

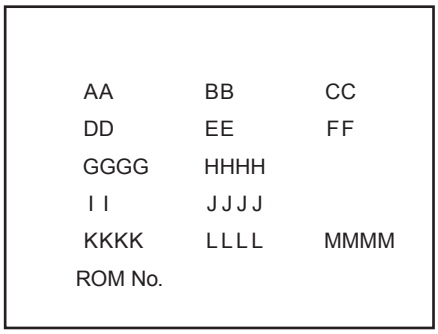
AA : Deck operation mode (See EMG detail information <1>.)
BB : Mechanism operation mode
(See EMG detail of information <1>.)
CC : Mechanism transition flag
DD : Capstan motor control status
EE : Loading motor control status
FF : Sensor information (See sensor information details.)
GG : Capstan motor speed
HH : Key code (JVC code)
I I : Supply reel winding diameter data higher 8 bits.
JJ : Supply reel winding diameter data lower 8 bits.
KK : Mechanism sensor information & mechanism mode position(See EMG detail of information <1>.)
LL : Tape speed data higher 8 bits.
MM : Tape speed data lower 8 bits.
NN : Cassette tape type <2> higher 8 bits.
(See EMG detail of information <2>.)
OO : Cassette tape type <2> lower 8 bits.
(See EMG detail of information <2>.)
PP : General data display area

YY : General data display area

***FF:Sensor information details**

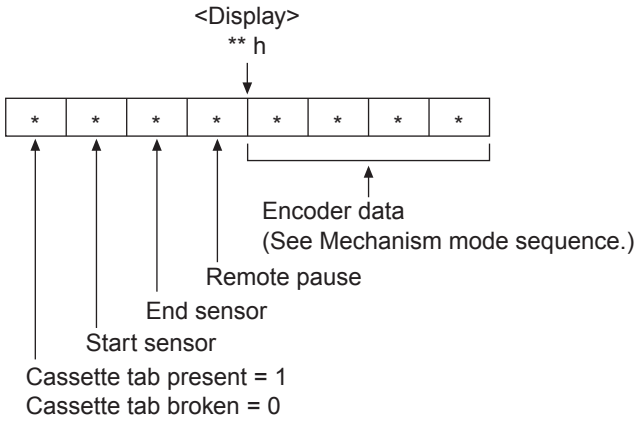


[For *HD only]



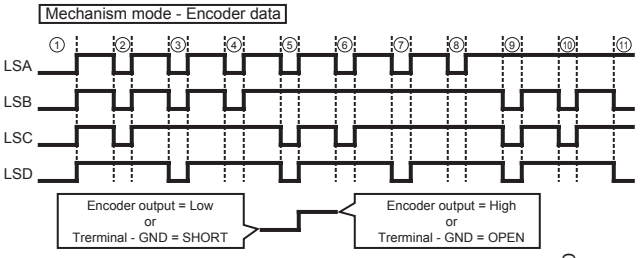
AA : Key code (JVC code)
BB : Deck operation mode(See EMG detail information <1>.)
CC : Mechanism operation mode (See EMG detail information <1>.)
DD : Sensor information (See sensor information details.)
EE : Capstan motor speed (Search, double speed)
FF : Tracking value
GGGG : Cassette tape type <2>, 16 bits.
(See EMG detail information <2>.)
HHHH : Supply reel winding diameter data
I I : Capstan motor speed (FF/REW, double speed)
JJJJ : Tape speed data, lower 8 bits.
KKKK : General data display area
LLLL : General data display area
MMMM : General data display area

***DD:Sensor information details**

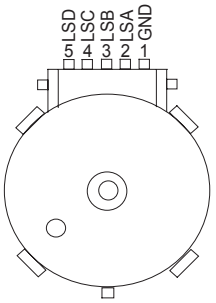


[For both MN*/HD*]

Mechanism mode sequence



No.	Position	Encoder data
①	EJECT	0 h = 0000
②	EJECT1	1 h = 0001
③	EJECT2	2 h = 0010
④	ULSTOP	3 h = 0011
⑤	UPPER	4 h = 0100
⑥	ONSTOP(PLAY)	5 h = 0101
⑦	FWD/SS	6 h = 0110
⑧	REV/SS	7 h = 0111
⑨	OFFSTOP	8 h = 1000
⑩	FFREW-BRAKE	9 h = 1001
⑪	FFREW	A h = 1010
⑫	MIDDLE	F h = 1111



5.3.4 EMG content description

Note:

EMG contents "E09" are for the model with Dynamic Drum (DD).

FDP	CONTENT	CAUSE
E01: Loading EMG	If the mechanism mode does not change to the next mode within 4 seconds after the loading motor starts rotating in the loading direction, while the mechanism is in the after-loading position (with the tape up against the pole base), [E:01] is identified and the power is switched OFF. However, if the tape loading is not completed within 4 seconds after the loading motor starts rotating in the loading direction, the tape is simply unloaded and ejected. No EMG data is recorded in this case.	1. The mechanism is locked in the middle of the mode transition during a tape loading operation. 2. The mechanism overruns during the tape loading operation because the SYSCON cannot recognize the mechanism mode normally. This problem is due to a cause such as a rotary encoder failure. 3. Power is not supplied to the loading MDA. (M12V/Vcc/Vref/ICP are disconnected in the middle.)
E02: Unloading EMG	When the mechanism mode cannot be changed to another mode even when the loading motor has rotated for more than 4 seconds in the unloading direction, [E:02] is identified and the power is turned off.	1. The mechanism is locked in the middle of mode transition. 2. Without an eject signal being sent from the SYSCON, unloading is attempted (i.e. Ejection is attempted while the tape is still inside the mechanism.) because the SYSCON cannot recognize the mechanism mode normally. This is due to a cause such as a rotary encoder failure. (Mechanism position: UPPER) 3. Power is not supplied to the loading MDA. (M12V/Vcc/Vref/ICP are disconnected in the middle.)
E03: Take Up Reel Pulse EMG	When the falling edje of the take-up reel pulse has not been generated for more than 4 seconds in the capstan rotating mode, [E:03] is identified, the pinch rollers are turned off and stopped, and the power is turned off. In this case, however, the mechanism should be in position after tape loading. Note that the reel EMG is not detected during Slow/Frame advance operations.	1. The take-up reel pulse is not generated in the FWD transport modes (PLAY/FWD SEARCH/FF, etc.) because; 1) The idler gear is not meshed with the take-up reel gear because the mechanism mal-functions for some reason. 2) The idler gear is meshed with the take-up reel gear, but incapable of winding due to too large mechanical load (abnormal tension); 3) The reel is rotating normally but an FG pulse is not generated due to the take-up reel sensor failure. 2. The supply reel pulse is not generated in the REV transport modes (REV SEARCH/REW, etc.) because; 1) The idler gear is not meshed with the supply reel gear because the mechanism mal-functions for some reason. 2) The idler gear is meshed with the supply reel gear, but incapable of winding due to too large a mechanical load (abnormal tension); 3) The reel rotates normally but the FG pulse is not generated due to a supply reel sensor failure. 3. Power(SW5V) is not supplied to the reel sensor on the tape winding side.
E04: Drum FG EMG	When the drum FG pulse has not been input for more than 3 seconds in the drum rotating mode, [E:04] is identified, the pinch rollers are turned off and stopped, and the power is turned off.	1. The drum could not start or the drum rotation has stopped due to too large a load on the tape, because; 1) The tape tension is abnormally high; 2) The tape is damaged or a foreign object (grease, etc.) adheres to the tape. 2. The drum FG pulse did not reach the System controller CPU because; 1) The signal circuit is disconnected in the middle; 2) The FG pulse generator (hall device) of the drum is faulty. 3. The drum control voltage (DRUM CTL V) is not supplied to the MDA. 4. Power (M12V) is not supplied to the drum MDA.
E05: Cassette Eject EMG	If the cassette does not reach the eject position within about 0.7 seconds after the cassette housing has started the cassette ejection operation, [E:05] is identified, the drive direction is reversed to load the tape, the mode is switched to STOP mode with the pinch roller OFF, and the power is switched OFF. During the cassette insertion process, the drive direction is reversed and the cassette is ejected if the tape is not up against the pole base within about 3 seconds after the start of the cassette pulling-in operation. If the cassette does not reach the eject position within about 0.7 seconds after the drive mode reversal operation, [E:05] is identified and the power is switched OFF immediately.	1. The cassette cannot be ejected due to a failure in the drive mechanism of the housing. 2. When the housing load increases during ejection, the loading motor is stopped because of lack of headroom in its drive torque. Housing load increasing factors: Temperature environment (low temperature, etc.), mechanism wear or failure. 3. The sensor/switch for detecting the end of ejection are not functioning normally. 4. The loading motor drive voltage is lower than specified or power (M12V) is not supplied to the motor (MDA). 5. When the user attempted to eject a cassette, a foreign object (or perhaps the user's hand) was caught in the opening of the housing.
E06: Capstan FG EMG	When the capstan FG pulse has not been generated for more than 1 second in the capstan rotating mode, [E:06] is identified, the pinch rollers are turned off and stopped, and the power is turned off.However, the capstan EMG is not detected in SLOW/STILL modes. Note that, if the part number of the System Control IC begins with "MN" or "M3", the capstan EMG is not detected even during the FF/REW operation.	1. The capstan could not start or the capstan rotation has stopped due to too large a load on the tape, because; 1) The tape tension is abnormally high (mechanical lock); 2) The tape is damaged or a foreign object (grease, etc.) is adhered to the tape (occurrence of tape entangling, etc.). 2. The capstan FG pulse did not reach the System controller CPU because; 1) The signal circuit is disconnected in the middle; 2) The FG pulse generator (MR device) of the capstans is faulty. 3. The capstan control voltage (CAPSTAN CTL V) is not supplied to the MDA. 4. Power (M12V, SW5V) are not supplied to the capstan MDA.
E07: SW Power Short-Circuit EMG	When short-circuiting of the SW power supply with GND has lasted for 0.5 second or more, [E:07] is identified, all the motors are stopped and the power is turned off.	1. The SW 5 V power supply circuit is shorted with GND. 2. The SW 12 V power supply circuit is shorted with GND.
E08: DVD EMG	When communication with a system computer of VHS side is not carried out because of the defective DVD unit, or when the DVD unit must be reset	1. The DVD unit is defective. 2. Contact failure of the wires in the DVD unit or VHS side.
E09: DD FG EMG	When the DD FG pulse is not generated within 2.5 seconds, [E:09] is identified, the tilt motor is stopped and the power is turned off.	1. The FG sensor is defective. (The soldered parts have separated.) 2. The pull-up resistor at the FG sensor output is defective. (The soldered parts have separated.) 3. Contact failure or soldering failure of the pins of the connector (board-to-board) to the FG sensor. 4. The power (5V) to the sensor is not supplied. (Connection failure/soldering failure) 5. The FG pulse is not sent to the System Controller CPU. 6. The tilt motor is defective. (The soldered parts have separated.) 7. The drive power to the tilt motor is not supplied. (Connection failure/soldering failure) 8. The tilt motor drive MDA - IC is defective. 9. Auto-recovery of the DD tilting cannot take place due to overrun.
E0A: Supply Reel Pulse EMG	When the falling edge of the supply reel pulse has not been generated for more than 10 seconds in the capstan rotating mode, [E:0A] is identified and the cassette is ejected (but the power is not turned off). In this case, however, the mechanism should be in the position after tape loading (with the tape up against the pole base). Also note that the reel EMG is not detected during Slow/Frame advance operations.	1. The supply reel pulse is not generated in the FWD transport mode (PLAY/FWD SEARCH/FF, etc.) because; 1) PLAY/FWD or SEARCH/FF is started while the tape in the inserted cassette is cut in the middle; 2) A mechanical factor caused tape slack inside and outside the supply reel side of the cassette shell. In this case, the supply reel will not rotate until the tape slack is removed by the FWD transport, so the pulse is not generated until then; 3) The reel is rotating normally but the FG pulse is not generated due to a supply reel sensor failure. 2. The take-up reel pulse is not generated in the REV transport mode (REV SEARCH/REW, etc.). 1) REV SEARCH/REW is started when the tape in the inserted cassette has been cut in the middle; 2) A mechanical factor caused tape slack inside and outside the take-up reel side of the cassette shell. In this case, the take up will not rotate until the tape slack is removed by the REV transport, so the pulse will not be generated until that time; 3) The reel is rotating normally but the FG pulse is not generated due to a take-up reel sensor failure. 3. The power (SW 5V) to a reel sensor is not supplied.
EU1: Head clog warning history	Presupposing the presence of the control pulse output in the PLAY mode, when the value obtained by mixing the two V.FM output channels (without regard to the A.FM output) has remained below a certain threshold level for more than 10 seconds, [E:U1] is identified and recorded in the emergency history. During the period in which the head clog is detected, the FDP shows "U:01" and the OSD repeats the "3 seconds of warning display" and the "7 seconds of noise picture display" alternately. EMG code : "E:C1" or "E:U1" / FDP : "U:01" / OSD : "Try cleaning tape." or "Use cleaning cassette." The head clog warning is reset when the above-mentioned threshold has been exceeded for more than 2 seconds or the mode is changed to another mode than PLAY.	

5.3.5 EMG detail information <1>

The status (electrical operation mode) of the VCR and the status (mechanism operation mode/sensor information) of the mechanism in the latest EMG can be confirmed based on the figure in EMG detail information <1> .

[FDP/OSD display] *1 : *2 : 34

*1 : Deck operation mode at the moment of EMG
*2 : Mechanism operation mode at the moment of EMG
3- : Mechanism sensor information at the moment of EMG
-4 : Mechanism mode position at the moment of EMG

Note:

- **For EMG detailed information <1>, the content of the code that is shown on the display (or OSD) differs depending on the parts number of the system control microprocessor (IC3001) of the VCR. The system control microprocessor parts number starts with two letters, refer these to the corresponding table.**

***1 : Deck operation mode**

[Common table of MN* and HD]

Display		Deck operation mode
MN*	HD*	
00	-	Mechanism being initialized
01	00	STOP with pinch roller pressure off (or tape present with P.OFF)
02	01	STOP with pinch roller pressure on
03	-	POWER OFF as a result of EMG
04	04	PLAY (Normal playback)
0C	0E	REC
10	11	Cassette ejected
20	22	FF
21	-	Tape fully loaded, START sensor ON, short FF
22	-	Cassette identification FWD SEARCH before transition to FF (SPx7-speed)
24	26	FWD SEARCH (variable speed) including x2-speed
2C	2E	INSERT REC
40	43	REW
42	-	Cassette identification REV SEARCH before transition to REW (SPx7-speed)
44	47	REV SEARCH (variable speed)
4C	4C	AUDIO DUB
6C	6E	INSERT REC (VIDEO + AUDIO)
84	84	FWD STILL / SLOW
85	85	REV STILL / SLOW
8C	8F	REC PAUSE
8D	-	Back spacing
8E	-	Forward spacing (FWD transport mode with BEST function)
AC	AF	INSERT REC PAUSE
AD	-	INSERT REC back spacing
CC	CD	AUDIO DUB PAUSE
CD	-	AUDIO DUB back spacing
EC	EF	INSERT REC (VIDEO + AUDIO) PAUSE
ED	-	INSERT REC (VIDEO + AUDIO) back spacing

***2 : Mechanism operation mode**

[Table of MN*]

Display	Mechanism operation mode
00	Command standby (No command to be executed)
01	Immediate Power OFF after EMG occurrence
02	Loading from an intermediate position during mechanism initialization
03	Unloading due to EMG occurrence during mechanism initialization
04	Ejecting cassette (ULSTOP to EJECT)
05	Inserting cassette (EJECT to ULSTOP)
06	Loading tape (ULSTOP to PLAY)
07	Unloading tape (PLAY to ULSTOP)
08	Transition from pinch roller ON to STOP
09	Transition from pinch roller OFF to STOP (PLAY to OFFSTOP)
0A	Transition from pinch roller OFF to STOP at power OFF
0B	Transition from pinch roller ON to STOP at power ON
0C	Transition to PLAY
0D	Transition to Search FF
0E	Transition to REC
0F	Transition to FWD STILL/SLOW
10	Transition to REV STILL/SLOW
11	Transition to Search REV
12	Transition from FF/REW to STOP
13	Transition to FF
14	Transition to REW
15	Tape end detection processing during loading
16	Short FWD/REV at tape sensor ON during unloading
17	Transition to FF/REW brake mode

[Table of HD*]

Display	Mechanism operation mode
00	STOP with pinch roller pressure off
01	STOP with pinch roller pressure on
02	U/L STOP (or tape being loaded)
04	PLAY (Normal playback)
05	PLAY (x1-speed playback using JOG)
0E	REC
11	Cassette ejected
22	FF
26	FWD SEARCH (variable speed) including x2-speed
2E	INSERT REC
43	REW
47	REV SEARCH
4C	AUDIO DUB
6E	INSERT REC (VIDEO + AUDIO)
84	FWD STILL/SLOW
85	REV STILL/SLOW
8F	REC PAUSE
AF	INSERT REC PAUSE
C7	REV SEARCH (x1-speed reverse playback using JOG)
CD	AUDIO DUB PAUSE
EF	INSERT REC (VIDEO + AUDIO) PAUSE
F0	Mechanism being initialized
F1	POWER OFF as a result of EMG
F2	Cassette being inserted
F3	Cassette being ejected
F4	Transition from STOP with pinch roller pressure on to STOP with pinch roller pressure off
F5	Transition from STOP with pinch roller pressure on to PLAY
F6	Transition from STOP with pinch roller pressure on to REC
F7	Cassette type detection SEARCH before FF/REW is being executed
F8	Tape being unloaded
F9	Transition from STOP with pinch roller pressure off to STOP with pinch roller pressure on
FA	Transition from STOP with pinch roller pressure off to FF/REW
FB	Transition from STOP with pinch roller pressure off to REC.P (T.REC,etc.)
FC	Transition from STOP with pinch roller pressure off to cassette type detection SEARCH
FD	Short REV being executed after END sensor on during unloading
FE	Tension loosening being executed after tape loading (STOP with pinch roller pressure on)
FF	Tape being unloaded

3- : Mechanism sensor information

[Common table of MN* and HD*]

Display	Mechanism sensor informatio n			
	REC safety SW	Start sensor	End sensor	Mechansim position sensor
0-	Tab broken	ON	ON	ON
1-	Tab broken	ON	ON	OFF
2-	Tab broken	ON	OFF	ON
3-	Tab broken	ON	OFF	OFF
4-	Tab present	OFF	ON	ON
5-	Tab present	OFF	ON	OFF
6-	Tab present	OFF	OFF	ON
7-	Tab present	OFF	OFF	OFF
8-	Tab broken	ON	ON	ON
9-	Tab broken	ON	ON	OFF
A-	Tab broken	ON	OFF	ON
B-	Tab broken	ON	OFF	OFF
C-	Tab present	OFF	ON	ON
D-	Tab present	OFF	ON	OFF
E-	Tab present	OFF	OFF	ON
F-	Tab present	OFF	OFF	OFF
	Tab broken = 0 Tab present = 1	Sensor ON = 0 sensor OFF = 1	Sensor ON = 0 Sensor OFF = 1	

-4 : Mechanism mode position

[Common table of MN* and HD*]

Mechanism sensor information	Dis-play	Deck operation mode	
Even number (0, 2, 4, 6, 8, A, C, E)	-0	Not established	
	-1	EJECT	EJECT position
	-2	EJECT-EJECT1	Intermodal position
	-3	EJECT1	EJECT1 position
	-4	EJECT1-EJECT2	Intermodal position
	-5	EJECT2	EJECT2 position
	-6	EJECT2-ULSTOP	Intermodal position
	-7	ULSTOP	ULSTOP position
	-8	ULSTOP-UPPER	Intermodal position
	-9	UPPER	Loading (unloading) tape
	-A	UPPER-ONSTOP	Intermodal position
	-B	ONSTOP	PLAY position
	-C	PLAY-FWD/SS	Intermodal position
	-D	FWD/SS	FWD (FWD Still/Slow) position
	-E	FWD/SS-REV	Intermodal position
	-F	REV	REV (REV Still/Slow) position
Odd number (1, 3, 5, 7, 9, B, D, F)	-0	REV-OFFSTOP	Intermodal position
	-1	OFFSTOP	Pinch roller OFF position
	-2	OFFSTOP-FFREWB	Intermodal position
	-3	FFREWB	FF/REW Brake position
	-4	FFREWB-FFREW	Intermodal position
	-5	FFREW	FF/REW position

5.3.6 EMG detail information <2>

The type of the cassette tape and the cassette tape winding position can be confirmed based on the figure in EMG detail information <2> .

Note:

- **EMG detail information <2> is the reference information stored using the remaining tape detection function of the cassette tape. As a result, it may not identify cassette correctly when a special cassette tape is used or when the tape has variable thickness.**

***5 : Cassette tape type <1>**

Display	Cassette tape type <1>
00	Cassette type not identified
16	Large reel/small reel (T-0 to T-15/T-130 to T-210) not classified
82	Small reel, thick tape (T-120) identified/thin tape (T-140) identified
84	Large reel (T-0 to T-60) identified
92	Small reel, thick tape (T-130) identified/thin tape (T-160 to T-210) identified
93	Small reel, thick tape/C cassette (T-0 to T-100/C cassette) not classified
C3	Small reel, thick tape/C cassette (T-0 to T-100/C cassette) being classified
D3	Small reel, thick tape/C cassette (T-0 to T-100/C cassette) being classified
E1	C cassette, thick tape (TC-10 to TC-20) identified
E2	Small reel, thick tape (T-0 to T-100) identified
E9	C cassette, thin tape (TC-30 to TC-40) identified
F1	C cassette, thick tape/thin tape (TC-10 to TC-40) not classified

Notes:

- **Cassette tape type <1> is identified a few times during mode transition and the identification count is variable depending on the cassette tape type. If an EMG occurs in the middle of identification, the cassette tape type may not be able to be identified.**
- **If other value than those listed in the above table is displayed, the cassette tape type is not identified.**

***6 : Cassette tape winding position**

The cassette tape winding position at the moment of EMG is displayed by dividing the entire tape (from the beginning to the end) in 21 sections using a hex number from “00” to “14”.

00 : End of winding
14 : Beginning of winding
FF : Tape position not identified

***7 : Cassette tape type <2> (Winding area)**

Display	Cassette tape type <2>		(Reference) Word data (Beginning) (End)
00	Cassette type not identified		
04 - 08	C cassette, thick tape	TC-10	(0497 - 0506) (0732 - 0858)
05 - 06	Small reel, thick tape	T-20	(05A9 - 0661)
05 - 0C	C cassette, thick tape	TC-20P	(0599 - 05FF) (0AA1 - 0C07)
06 - 0C	C cassette, thin tape	TC-40	(0623 - 063D) (0C41 - 0CC3)
06 - 0C	C cassette, thin tape	TC-30	(0611 - 0638) (0C0C - 0CB2)
07 - 08	Small reel, thick tape	T-40	(07CC - 08E5)
09 - 0B	Small reel, thick tape	T-60	(09FD - 0B78)
0C - 0D	Small reel, thick tape	T-80(DF-160)	(0C20 - 0DFC)
0D - 0F	Small reel, thick tape	T-90(DF-180)	(0D31 - 0F3E)
0E - 10	Small reel, thick tape	T-100	(0E43 - 107F)
10 - 12	Small reel, thin tape	T-140	(10E1 - 120C)
10 - 13	Small reel, thick tape	T-120(DF-240)	(1073 - 1313)
11 - 14	Small reel, thick tape	T-130	(1185 - 1429)
12 - 14	Small reel, thin tape	T-160	(12D3 - 141F)
13 - 14	Small reel, thin tape	T-210(DF-420)	(1373 - 14C3)
13 - 14	Small reel, thin tape	T-180(DF-360)	(1357 - 14C0)
13 - 14	Small reel, thin tape	T-168	(1395 - 14EE)
13 - 14	Small reel, thick tape	DF-300	(13A8 - 14CE)
15 - 16	Large reel	T-20	(1536 - 1618)
16 - 17	Large reel	T-30	(1647 - 175A)
17 - 18	Large reel	T-40	(1759 - 189C)
19 - 1B	Large reel	T-60	(1989 - 1B2F)

Note:

- **The values of cassette tape type <2> in the above table are typical values with representative cassette tapes.**

5.3.7 EMG detail information <3>

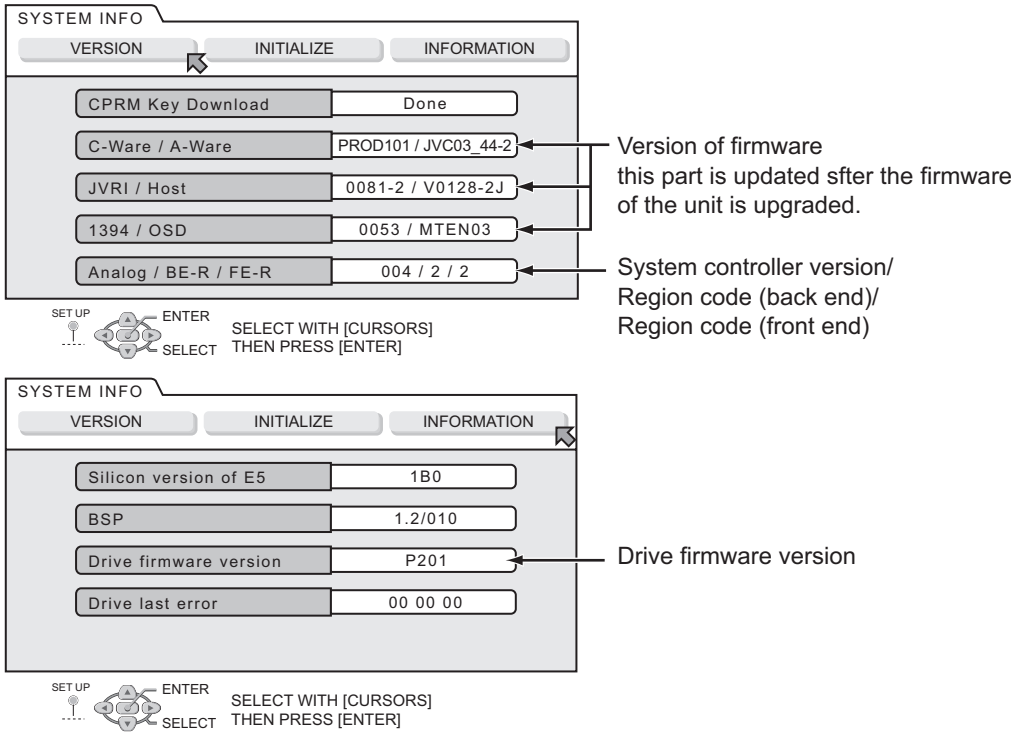
Three deck operation modes preceding the deck operation mode in which the EMG occurs may be confirmed based on the figures in the EMG information detail <3>. For the contents of the displayed information, see the table "Deck operation mode" in section "5.3.5 EMG detail information <1>".

5.4 Display function of DVD section

5.4.1 Displaying SYSTEM INFO

SYSTEM INFO contains information on firmware version of the unit and the mechanism drive, and an initialize execution menu.

(1) Set the unit to the Jig RCU mode.
(2) Transmit "8b" from the JIG RCU.
(3) SYSTEM INFORMATION menu is displayed in the screen.
(4) To move cursor in SYSTEM INFO, use the " ▲", "▼ ", "◀ ", and "▶ " buttons of a remote control unit attached to product.
(5) To quit the SYSTEM INFO menu, transmit "8b" from the JIG RCU..
(6) Cancel JIG RCU mode.



NOTE:

Items other than the ones described above are not used in service work.

5.4.2 Upgrading firmware of the unit

- Firmware upgrade disk supports only DVD-RAM media
- When firmware needs to be upgraded, Digital Video Storage CSG will distribute a firmware upgrade disk.

(1) Set the unit to the Jig RCU mode.
(2) Set the unit to DVD mode.(DVD lamp lights up)
(3) Transmit "70" from the JIG RCU.
(4) "UPDATE" appears in FDP, load the upgrade disk on the disk tray then close the disk tray.
(5) Wait for approx.30 seconds while FDP is displayed as "UPDATE."
(6) Then, "FW UPDATE" appears in FDP. It takes approx. 3 minutes at maximum to upgrade firmware.
(7) The tray is ejected. Then, take out the disk and close the tray.
(8) The tray is ejected. Then, take out the disk and close the tray.Turn off the unit, and unplug the AC power cord from the AC outlet. Then plug the AC power cord into the AC outlet.
(9) "LOADING" of FDP disappears. then, turn on the unit.
(10) Display the SYSTEM INFO menu, and check the version of the firmware.
(11) Cancel the JIG RCU mode

ATTENTION :

Firmware may sometimes not be upgraded successfully.
If firmware is not upgraded successfully, the tray opens, and "ERROR" appears in FDP.
If firmware is upgraded successfully, the tray opens, and "OPEN" appears in FDP.
If unplug the AC power cord from the AC outlet while "ERROR" appears, data in the flash memory is destroyed and the unit cannot start: the flash memory needs to be replaced.
After upgrading procedure, pay enough attention to FDP when the tray opens.
When "ERROR" appears, upgrade firmware again in the following way to restore the firmware

(1) Transmit "70" from theJIG RCU while the tray opens.
(2) When "UPDATE" appears in FDP, close the tray and make the unit read the disk. Upgrading starts.
(3) After (2), perform upgrading procedure (4) - (10) of 5.4.2 Upgrading firmware of the unit above.

5.4.3 The exchange method of a tray fitting

When DVD unit is exchanged, please transplant a tray fitting from an old drive, or change for a new tray fitting.

5.4.4 Initialization method

Since the information on internal is as follows if it initializes, before enforcement, it is required to surely obtain the approval of a customer.

All initial setting of DVD returns to an initial state.

(1) Set the unit to theJIG RCU mode.
(2) Set the unit to DVD mode.(DVD lamp lights up)
(3) Press the "POWER" button on the unit to turn off the unit.
(4) Transmit "6F" from the JIG RCU.
(5) Confirm the FDP changes from "FACTORY" to "CHECK OK".
(6) Press the "VCR/DVD" buttojn on the unit so that the VCR lamp lights up on the unit.
(7) To cancel JIG RCU mode transmit "9D" from the JIG RCU.

5.4.5 The setting method of a region code

A region code should be set after a DVD unit is replaced.

While a DVD unit is in a warehouse as a stock, a region code of the DVD unit is not determined.

Only replacement of a DVD unit may cause abnormal playback of Disc.

Set a region code of a DVD unit in the following procedure.

(1) Replace a DVD unit.
(2) Set the unit to JIG RCU mode.
(3) Insert a DVD-RAM disc in the unit to make the unit read the DVD-RAM disc.(The DVD-RAM disk used in this procedure is not a disk for upgrade. If it is a DVD-RAM disk, it is good anything.)
(4) Transmit "F2" from the JIG RCU.
(5) "REGION 2" is displayed on FDP.
(6) Set the unit to STANDBY mode.
(7) Turn the POWER switch ON.
(8) To cancel JIG RCU mode transmit "9D" from the JIG RCU.
(9) Colon is displayed on a clock on FL display.
(10) Setting is completed in the procedure above.

PARTS LIST

[DR-MV1BEK, DR-MV1BEU, DR-MV1SEF, DR-MV1SEK, DR-MV1SEU]

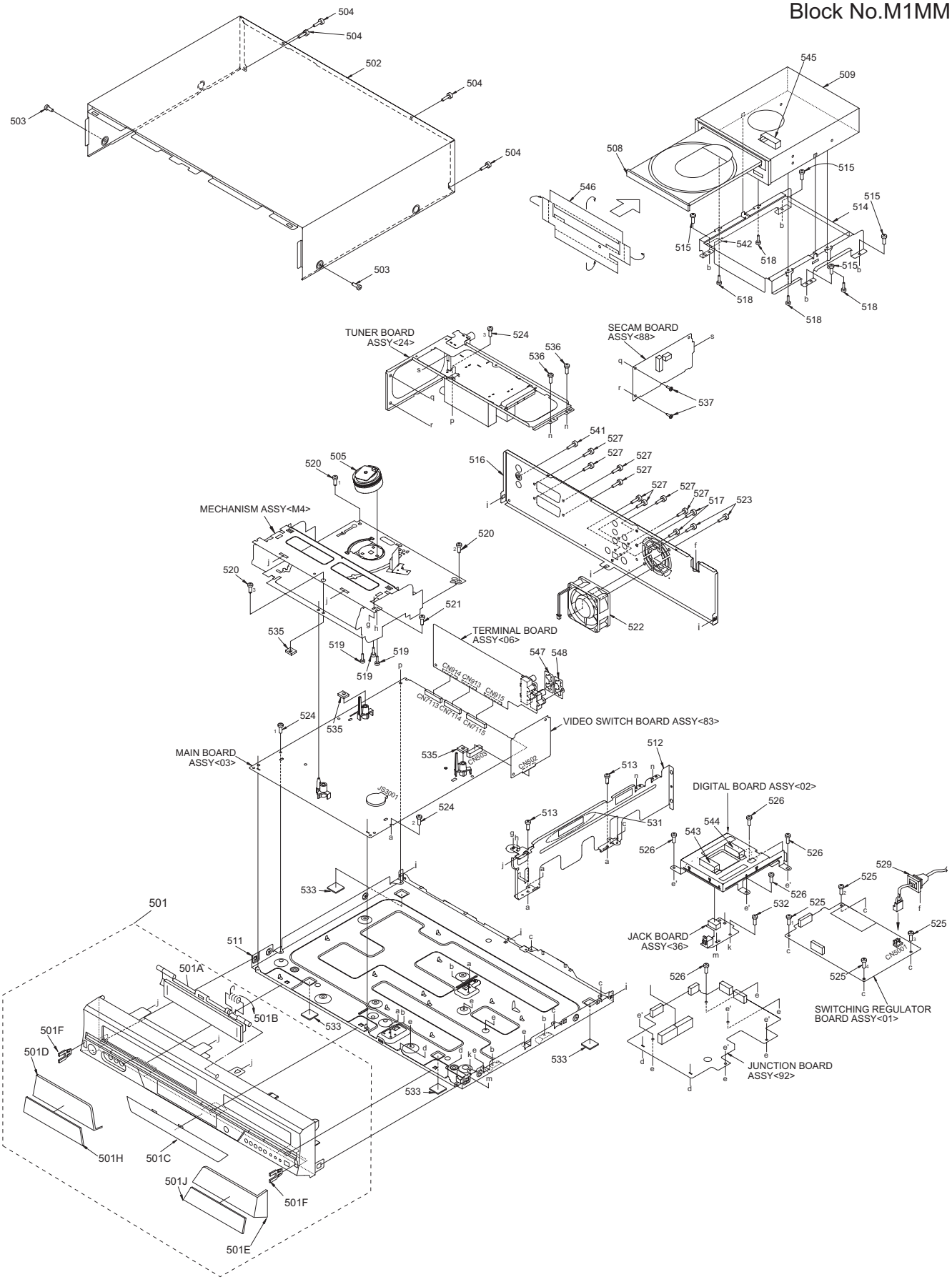
* SAFETY PRECAUTION
  Parts identified by the ⚠ symbol are critical for safety. Replace only with specified part numbers.
* BEWARE OF BOGUS PARTS
  Parts that do not meet specifications may cause trouble in regard to safety and performance. We recommend that genuine JVC parts be used.
* (x_) in a description column shows the number of the used part.

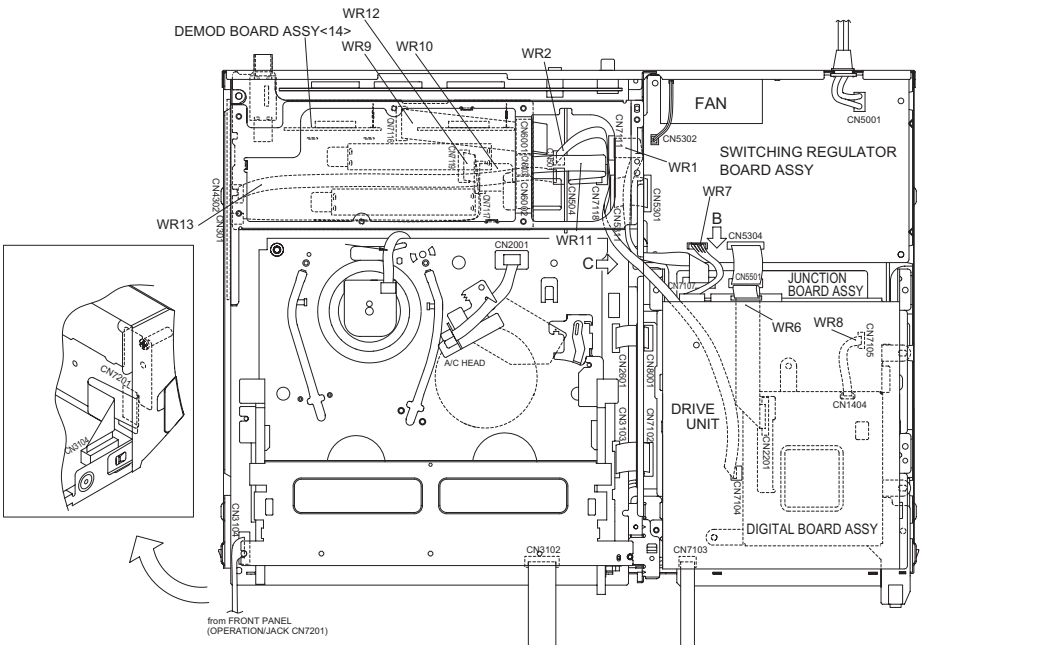
- Contents -

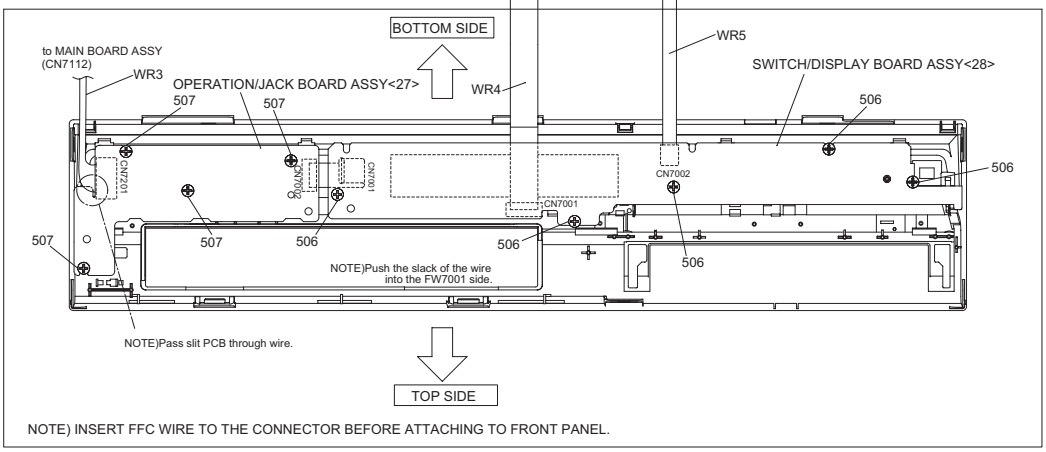
Exploded view of general assembly and parts list ---------- 3-2
DVD mechanism assembly and parts list ---------- 3-6
Electrical parts list ---------- 3-9
Packing materials and accessories parts list ---------- 3-27

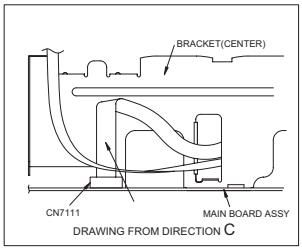
Exploded view of general assembly and parts list

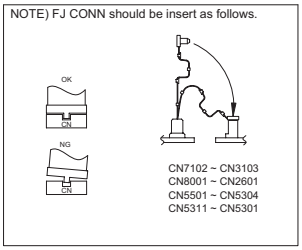
Block No.M1MM

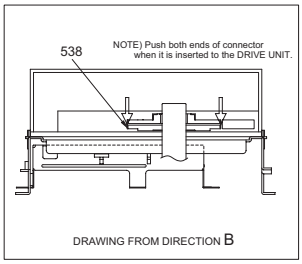


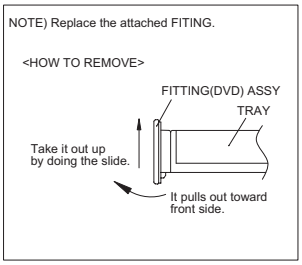

WR12
DEMOD BOARD ASSY<14>
WR9
WR10
WR2
FAN
CN5001
CN5302
SWITCHING REGULATOR
BOARD ASSY
WR1
WR7
B
CN5304
WR13
WR11
C
CN2001
JUNCTION
BOARD ASSY
WR6
WR8
A/C HEAD
DRIVE
UNIT
CN1404
DIGITAL BOARD ASSY
CN3102
CN7103
from FRONT PANEL
(OPERATION/JACK CN7201)


BOTTOM SIDE
to MAIN BOARD ASSY
(CN7112)
WR3
OPERATION/JACK BOARD ASSY<27>
WR4
WR5
SWITCH/DISPLAY BOARD ASSY<28>
507
506
CN7002
CN7001
NOTE)Push the slack of the wire
into the FW7001 side.
NOTE)Pass slit PCB through wire.
TOP SIDE
NOTE) INSERT FFC WIRE TO THE CONNECTOR BEFORE ATTACHING TO FRONT PANEL.


BRACKET(CENTER)
CN7111
MAIN BOARD ASSY
DRAWING FROM DIRECTION C


NOTE) FJ CONN should be insert as follows.
OK
NG
CN7102 ~ CN3103
CN8001 ~ CN2601
CN5501 ~ CN5304
CN5311 ~ CN5301


538
NOTE) Push both ends of connector
when it is inserted to the DRIVE UNIT.
DRAWING FROM DIRECTION B


NOTE) Replace the attached FITING.
<HOW TO REMOVE>
FITTING(DVD) ASSY
TRAY
Take it out up
by doing the slide.
It pulls out toward
front side.

MODEL	MARK	MODEL	MARK
DR-MV1BEK	A	DR-MV1SEK	D
DR-MV1BEU	B	DR-MV1SEU	E
DR-MV1SEF	C		

General assembly

Block No. [M][1][M][M]

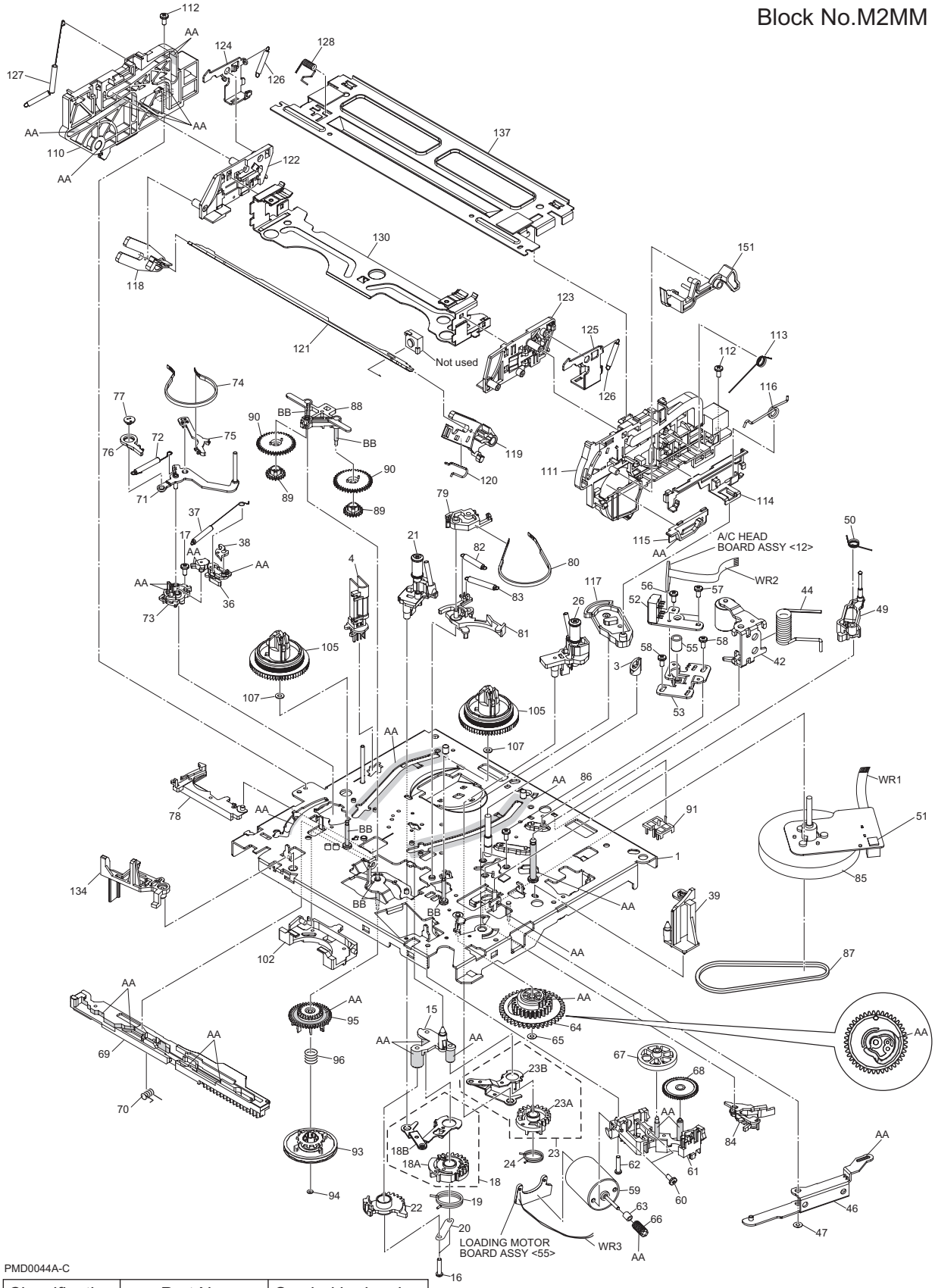
⚠ Symbol No.	Part No.	Part Name	Description	Local
⚠501	LP10526-014A	FRONT PANEL ASSY		A
⚠501	LP10526-013A	FRONT PANEL ASSY		B
⚠501	LP10526-009B	FRONT PANEL ASSY		C
⚠501	LP10526-008B	FRONT PANEL ASSY		D
⚠501	LP10526-007B	FRONT PANEL ASSY		E
501A	LP21232-006A	CASSETTE DOOR		A,B
501A	LP21232-001A	CASSETTE DOOR		C,D,E
501B	PQ46448	TORSION SPRING		
501C	LP31358-007A	DISPLAY WINDOW		A,B
501C	LP31358-005A	DISPLAY WINDOW		C,D,E
501D	LP31353-003A	DOOR(L)		A,B
501D	LP31353-001A	DOOR(L)		C,D,E
501E	LP31354-003A	DOOR(R)		A,B
501E	LP31354-001A	DOOR(R)		C,D,E
501F	PU60109	CATCHER	(x2)	
501H	LP31356-014A	WINDOW(L)		A
501H	LP31356-013A	WINDOW(L)		B
501H	LP31356-009A	WINDOW(L)		C
501H	LP31356-008A	WINDOW(L)		D
501H	LP31356-007A	WINDOW(L)		E
501J	LP31357-012A	WINDOW(R)		A
501J	LP31357-011A	WINDOW(R)		B
501J	LP31357-007A	WINDOW(R)		D
501J	LP31357-006A	WINDOW(R)		C,E
⚠502	LP10460-008B	TOP COVER		A,B
⚠502	LP10460-004C	TOP COVER		D
⚠502	LP10460-004C	TOP COVER		C,E
503	QYSBSG3006MA	TAP SCREW	M3 x 6mm TOP SIDE(x2)	A,B
503	QYSBSG3006NA	TAP SCREW	M3 x 6mm TOP SIDE(x2)	C,D,E
504	QYSBSG3006MA	TAP SCREW	M3 x 6mm TOP REAR(x4)	A,B
504	QYSBSG3006NA	TAP SCREW	M3 x 6mm TOP REAR(x4)	C,D,E
505	PDV2541A	DRUM FINAL ASSY		C
505	PDV2539A	DRUM FINAL ASSY		A,B,D,E
506	QYTDSF2608ZA	TAP SCREW	M2.6 x 8mm SWITCH/DISPLAY(x5)	
507	QYTDSF2608ZA	TAP SCREW	M2.6 x 8mm OPERATION/JACK(x4)	
508	LP31372-002A	FITTING(DVD) ASSY		
⚠509	QAL0551-002	DRIVE UNIT		A,B
⚠509	QAL0551-001	DRIVE UNIT		C,D,E
⚠511	LP10525-001D	BOTTOM CHASSIS		
512	LP21222-001B	BRACKET(CENTER)		
513	LP31391-001A	SPECIAL SCREW	BRACKET(CENTER)(x2)	
514	LP21223-001A	BRACKET(DRIVE UNIT)		
515	LP31391-001A	SPECIAL SCREW	BRACKET(DVD)(x4)	
⚠516	LP21134-014B	REAR COVER		
517	QYSBSG3006NA	TAP SCREW	M3 x 6mm REAR COVER(x2)	
518	QYTDST3006ZA	TAP SCREW	M3 x 6mm DRIVE(x4)	
519	QYSPSPD3008ZA	SCREW	M3 x 8mm DRUM(x3)	
520	LP31391-002A	SPECIAL SCREW	MECHANISM(x3)	
521	LP31391-001A	SPECIAL SCREW	HOUSING	
522	QAR0310-001	FAN MOTOR		
523	QYTDSF3008MA	TAP SCREW	M3 x 8mm FAN(x2)	
524	LP31391-001A	SPECIAL SCREW	MAIN(x3)	
525	LP31391-001A	SPECIAL SCREW	SWITCHING REGULATOR(x4)	
526	LP31391-001A	SPECIAL SCREW	JUNCTION(x5)	
527	QYTDSF3008MA	TAP SCREW	M3 x 8mm JACK COVER(x8)	
⚠529	QMP51K0-170-K	POWER CORD	1.7m BLACK	A,D
⚠529	QMP4A10-170-K	POWER CORD	1.7m BLACK	B,C,E
531	LP31390-001A	BARCODE LABEL		
532	LP31391-001A	SPECIAL SCREW	JACK	
533	LP31348-001A	FOOT	(x4)	
535	LP41140-001A	INSULATOR	(x3)	
536	LP31391-001A	SPECIAL SCREW	TUNER BRACKET(x2)	
537	LP31391-001A	SPECIAL SCREW	SECAM(x2)	C
538	QGZ0018A1-40	CONNECTOR	(1-40)	
541	QYTDST3005MA	TAP SCREW	M3 x 5mm TUNER	
542	LP30002-0F6A	SPACER	DVD BRACKET	
543	LP41171-001A	SHIELD TIGHT		
544	LP41171-001A	SHIELD TIGHT		
545	LP41171-001A	SHIELD TIGHT		
546	LP31417-001A	SHIELD PLATE		
547	LP31345-001A	EARTH PLATE		
548	LP31345-001A	EARTH PLATE		
WR 1	QUQ112-0918CG	FFC WIRE	JUNCTION CN7107-MAIN CN 7111	
WR 2	QUQ212-0430CG	FFC WIRE	VIDEO SWITCH CN501-JUNCTION CN7104	
WR 3	QUQ112-1308CG	FFC WIRE	OPERATION/JACK CN7201-MAIN CN7112	
WR 4	WJT0151-001A	E-CARD WIRE	SWITCH/DISPLAY CN7001-MAIN CN3102	
WR 5	QUQ212-0410CG	FFC WIRE	SWITCH/DISPLAY CN7002-JUNCTION CN7103	
WR 6	QUQ105-4020AF	FFC WIRE	DRIVE UNIT-DIGITAL CN2201	
WR 7	QJJ032-040804	SIN CR C-C WIRE	SWITCHING REGULATOR CN5303-DRIVE UNIT	

MODEL	MARK	MODEL	MARK
DR-MV1BEK	A	DR-MV1SEK	D
DR-MV1BEU	B	DR-MV1SEU	E
DR-MV1SEF	C		

⚠ Symbol No.	Part No.	Part Name	Description	Local
WR 8	QUQ210-0406CC	FFC WIRE	JUNCTION CN7105-DIGITAL CN1404	
WR 9	QUQ112-1420CG	FFC WIRE	TUNER CN6001-MAIN CN7116	
WR10	QUQ112-1315CG	FFC WIRE	TUNER CN6002-MAIN CN7117	
WR11	QUQ112-0716CG	FFC WIRE	TUNER CN6003-MAIN CN7118	
WR12	QUQ112-1524CG	FFC WIRE	SECAM CN301-MAIN CN7119	C
WR13	QUQ112-0628CG	FFC WIRE	VIDEO SWITCH CN504-SECAM CN4302	C

VHS mechanism assembly and parts list

Block No.M2MM



PMD0044A-C

Classification	Part No.	Symbol in drawing
Grease	KYODO-SH-JB	AA
Oil	COSMO-HV56	BB

NOTE: The section marked in **AA** and **BB** indicate lubrication and greasing areas.

MODEL	MARK	MODEL	MARK
DR-MV1BEK	A	DR-MV1SEK	D
DR-MV1BEU	B	DR-MV1SEU	E
DR-MV1SEF	C		

VHS mechanism

Block No. [M][2][M][M]

⚠ Symbol No.	Part No.	Part Name	Description	Local
1	LP21039-003A	MAIN DECK ASSY		
3	LP40097-002E	GUIDE POLE CAP		
4	NAH0004-001	FULL ERASE HEAD		
15	LP30958-001B	LOADING GEAR BASE		
16	QYTPST2620ZA	TAP SCREW	M2.6 x 20mm(x2)	
17	QYTDST2606ZA	TAP SCREW	M2.6 x 6mm	
18	LP40798-002A	LOADING GEAR(SUPPLY) ASSY		
18A	LP21040-001A	LOADING GEAR(SUPPLY)		
18B	LP40799-002A	LOADING ARM(SUPPLY) ASSY		
19	LP40837-001A	TORSION SPRING(SUPPLY)		
20	LP40903-004A	FIXING PLATE		
21	LP40806-001D	POLE BASE ASSY(SUPPLY)		
22	LP30959-001B	LOADING GEAR		
23	LP40802-002A	LOADING GEAR(TAKE UP) ASSY		
23A	LP21041-001D	LOADING GEAR(TAKE UP)		
23B	LP40803-002A	LOADING ARM(TAKE UP) ASSY		
24	LP40838-001A	TORSION SPRING(TAKE UP)		
26	LP40808-001E	POLE BASE ASSY(TAKE UP)		
36	LP21055-001G	TAKE UP LEVER		
37	LP40943-001A	TENSION SPRING		
38	LP40859-001D	T-UP HEAD		
39	LP30961-001C	LID GUIDE		
42	LP40810-003A	PINCH ROLLER ARM ASSY		
44	LP40840-001E	TORSION SPRING		
46	LP30963-002A	PRESS LEVER		
47	PQM30017-24	SLIT WASHER		
49	LP40813-001D	GUIDE ARM ASSY		
50	LP40841-001A	TORSION SPRING		
51	LP30002-090A	SPACER		
52	NAH0003-001	AC HEAD		
53	LP30965-003A	HEAD BASE		
55	LP40842-001D	COMPRESSION SPRING		
56	QYTDST2006MA	TAP SCREW	M2 x 6mm	
57	LP41036-002A	A/C ADJ.SCREW	(x2)	
58	QYTDST2606ZA	TAP SCREW	M2.6 x 6mm(x2)	
59	QAR0289-001	LOADING MOTOR		
60	QYTPSP3003ZA	SCREW	M3 x 3mm(x2)	
61	LP21056-002J	MOTOR BRACKET		
62	QYTPST2620ZA	TAP SCREW	M2.6 x 20mm	
63	LP40814-001B	WORM BEARING		
64	LP21044-001E	CONTROL CAM		
65	PQM30017-24	SLIT WASHER		
66	LP40815-001A	WORM GEAR		
67	LP40816-001B	HELICAL GEAR		
68	LP40817-001A	CONNECT GEAR		
69	LP10400-001N	CONTROL PLATE		
70	LP40843-001A	TORSION SPRING		
71	LP40818-002A	TENSION ARM ASSY		
72	LP40844-001F	TENSION SPRING		
73	LP21045-001E	TENSION ARM BASE		
74	LP40821-001A	TENSION BAND ASSY		
75	LP30967-001B	BAND HOLDER-1		
76	LP30968-001C	BAND HOLDER-2		
77	LP40822-002B	ADJUST PIN		
78	LP31000-005E	TENSION ARM LEVER		
79	LP21046-001C	MAIN BRAKE(TAKE UP)		
80	LP40824-001A	BAND BRAKE ASSY		
81	LP30969-002B	BRAKE LEVER		
82	LP30003-033C	TENSION SPRING		
83	LP30003-035C	TENSION SPRING		
84	LP40825-001B	CAPSTAN BRAKE ASSY		
⚠ 85	QAR0267-002	CAPSTAN MOTOR		
86	QYTPSG2606ZA	TAP SCREW	M2.6 x 6mm(x3)	
87	LP30005-010A	BELT	CAPSTAN MOTOR	
88	LP30970-001A	IDLER ARM		
89	LP40828-004A	IDLER GEAR 1	(x2)	
90	LP40829-002A	IDLER GEAR 2	(x2)	
91	LP31014-002A	WIRE HOLDER		
93	LP40934-001B	CLUTCH UNIT		
94	PQM30017-47	SLIT WASHER		
95	LP30973-001A	DIRECT GEAR		
96	LP40939-001A	COMPRESSION SPRING		
102	LP30974-001C	CHANGE LEVER		
105	LP21049-001A	REEL DISK	(x2)	
107	LP30017-004A	SPACER	REEL DISK(x2)	
110	LP10401-001L	SIDE FRAME(L)		
111	LP10402-001M	SIDE FRAME(R)		
112	QYTDST2606ZA	TAP SCREW	M2.6 x 6mm(x2)	
113	LP40917-001D	TORSION SPRING		

MODEL	MARK	MODEL	MARK
DR-MV1BEK	A	DR-MV1SEK	D
DR-MV1BEU	B	DR-MV1SEU	E
DR-MV1SEF	C		

⚠ Symbol No.	Part No.	Part Name	Description	Local
114	LP30976-002B	SIDE PLATE		
115	LP30977-002E	LIMIT PLATE		
116	LP40846-001C	LIMIT SPRING		
117	LP31100-002A	DRIVE LEVER		
118	LP30978-001B	DRIVE ARM(L)		
119	LP30979-001S	DRIVE ARM(R)		
120	LP40847-001B	TORSION SPRING		
121	LP30980-002A	CONNECT PLATE		
122	LP10403-001C	SIDE HOLDER(L)		
123	LP10404-001E	SIDE HOLDER(R)		
124	LP30983-002A	LOCK LEVER(L)		
125	LP30984-002A	LOCK LEVER(R)		
126	LP40924-001D	TENSION SPRING	(x2)	
127	LP40972-001A	EARTH SPRING(1)		
128	LP40857-001B	EARTH SPRING(2)		
130	LP30981-003A	CASSETTE HOLDER ASSY		
134	LP21051-002C	REC SAFETY LEVER		
137	LP21052-002A	TOP FRAME		
151	LP30985-002M	DOOR OPENER		
WR1	WJT0117-001A	E-CARD WIRE	DRUM	
WR2	WJT0067-001B	E-CARD WIRE	A/C HEAD CN2001	
WR3	WJS0022-001A	E-FL/RB WIRE	LOADING MOTOR	

MODEL	MARK	MODEL	MARK
DR-MV1BEK	A	DR-MV1SEK	D
DR-MV1BEU	B	DR-MV1SEU	E
DR-MV1SEF	C		

Electrical parts list

Switching regulator board

Block No. [0][1]

⚠ Symbol No.	Part No.	Part Name	Description	Local
PW1	LPA10248-01C1	SWITCHING REGULATOR BOARD ASSY		
IC5101	STR-G6653-F9	IC		
IC5301	UTCTL431-T	IC		
IC5301 or	MM1431AT-T	IC		
IC5301 or	L5431-T	IC		
IC5301 or	TL431/A/-T	IC		
IC5302	PQ5EV3	IC		
Q5304	UMD12N-W	DIGI TRANSISTOR		
Q5304 or	XP4313-W	DIGI TRANSISTOR		
Q5305	2SD2144S/UV/-T	TRANSISTOR		
Q5305 or	2SC3576-JVC-T	TRANSISTOR		
Q5306	2SC5739/QP/	TRANSISTOR		
Q5307	2SA1585S/QR/-T	TRANSISTOR		
Q5308	PDTC114EU-X	DIGI TRANSISTOR		
Q5308 or	DTC114EUA-X	DIGI TRANSISTOR		
Q5308 or	UN5211-X	DIGI TRANSISTOR		
Q5308 or	RN1302-X	DIGI TRANSISTOR		
Q5313	2SA1585S/QR/-T	TRANSISTOR		
Q5314	2SA1585S/QR/-T	TRANSISTOR		
Q5315	PDTC114EU-X	DIGI TRANSISTOR		
Q5315 or	DTC114EUA-X	DIGI TRANSISTOR		
Q5315 or	UN5211-X	DIGI TRANSISTOR		
Q5315 or	RN1302-X	DIGI TRANSISTOR		
D5001	GBJ4J	BRIDGE DIODE		
D5001 or	D3SBA60	DIODE		
D5101	SARS01-T2	SI DIODE		
D5103	1F4G-T2	FR DIODE		
D5103 or	10ERB20-T2	FR DIODE		
D5103 or	ERA18-02-T2	FR DIODE		
D5103 or	AU01Z-T2	FR DIODE		
D5103 or	1SR153-400-T2	FR DIODE		
D5104	1SS133-T2	DIODE		
D5104 or	1SS270A-T2	SI DIODE		
D5105	10ERB20-T2	FR DIODE		
D5105 or	ERA18-02-T2	FR DIODE		
D5105 or	AU01Z-T2	FR DIODE		
D5105 or	1SR153-400-T2	FR DIODE		
D5105 or	1F4G-T2	FR DIODE		
D5106	10ERB20-T2	FR DIODE		
D5106 or	ERA18-02-T2	FR DIODE		
D5106 or	AU01Z-T2	FR DIODE		
D5106 or	1SR153-400-T2	FR DIODE		
D5106 or	1F4G-T2	FR DIODE		
D5202	1SR156-400-X	SI DIODE		
D5203	RL2Z-LFB2	FRD		
D5204	D1FS4A-X	SB DIODE		
D5205	RK34-LFB2	SB DIODE		
D5206	RK34-LFB2	SB DIODE		
D5207	D1FS4A-X	SB DIODE		
D5208	RK34-LFB2	SB DIODE		
D5209	RK34-LFB2	SB DIODE		
D5210	1F4G-T2	FR DIODE		
D5210 or	PG104RS-T2	FR DIODE		
D5210 or	10ERB20-T2	FR DIODE		
D5210 or	1SR153-400-T2	FR DIODE		
D5210 or	ERA18-02-T2	FR DIODE		
D5211	ERA18-02-T2	FR DIODE		
D5211 or	1SR153-400-T2	FR DIODE		
D5211 or	10ERB20-T2	FR DIODE		
D5211 or	1F4G-T2	FR DIODE		
D5212	D1FS4A-X	SB DIODE		
D5213	1F4G-T2	FR DIODE		
D5213 or	10ERB20-T2	FR DIODE		
D5213 or	ERA18-02-T2	FR DIODE		
D5213 or	AU01Z-T2	FR DIODE		
D5213 or	1SR153-400-T2	FR DIODE		
D5301	MTZJ15A-T2	Z DIODE		
D5301 or	RD15ES/B1/-T2	Z DIODE		
D5303	MTZJ11C-T2	Z DIODE		
D5303 or	RD11ES/B3/-T2	Z DIODE		
D5304	MTZJ5.6C-T2	Z DIODE		
D5304 or	RD5.6ES/B3/-T2	Z DIODE		
D5306	RK34-LFB2	SB DIODE		
D5307	RK34-LFB2	SB DIODE		
D5308	RK34-LFB2	SB DIODE		
D5309	1S4-T2	SB DIODE		
D5309 or	SBO40-T2	SB DIODE		
D5309 or	AW04-T2	SB DIODE		
D5312	1SS133-T2	DIODE		
D5312 or	1SS270A-T2	SI DIODE		
D5313	1A3G-T2	SI DIODE		
D5313 or	ERA15-02-T2	SI DIODE		
D5313 or	10EDB20-T2	SI DIODE		
⚠ PC5101	PC123Y22FZ	PHOTO COUPLER		
⚠ C5001	QFZ9073-683	MM CAPACITOR	0.068uF AC250V M	
⚠ C5002	QFZ9051-223	MM CAPACITOR	0.022uF 250V M	
C5003	QEZ0374-107	E CAPACITOR	100uF 400V M	
⚠ C5004	QCZ9079-222	C CAPACITOR	2200pF AC250V M	
C5101	QCZ0339-101Z	C CAPACITOR	100pF 1kV K	
C5102	QCZ0349-472Z	C CAPACITOR	4700pF 1kV K	
C5103	QEMU1VM-276Z	E CAPACITOR	27uF 35V M	
C5104	QCZ0136-102Z	C CAPACITOR	1000pF 1kV K	
C5105	QFLC1HJ-471Z	M CAPACITOR	470pF 50V J	
C5106	NCB21HK-103X	C CAPACITOR	0.01uF 50V K	
C5107	NCB21HK-221X	C CAPACITOR	220pF 50V K	
C5202	QETN2AM-475Z	E CAPACITOR	4.7uF 100V M	
C5203	QEMT1CM-687	E CAPACITOR	680uF 16V M	
C5204	QEMT1CM-687	E CAPACITOR	680uF 16V M	
C5205	QEMT1AM-128	E CAPACITOR	1200uF 10V M	
C5206	QECS1AM-128	E CAPACITOR	1200uF 10V M	
C5207	QECS0JM-158	E CAPACITOR	1500uF 6.3V M	
C5208	QEMT1AM-108	E CAPACITOR	1000uF 10V M	
C5209	QEMU1HM-186Z	E CAPACITOR	18uF 50V M	
C5210	QEMX0JM-227Z	E CAPACITOR	220uF 6.3V M	
C5301	QFVF1HJ-154Z	MF CAPACITOR	0.15uF 50V J	
C5302	QFLC1HJ-333Z	M CAPACITOR	0.033uF 50V J	
C5303	QETN1CM-107Z	E CAPACITOR	100uF 16V M	
C5304	QETN1CM-107Z	E CAPACITOR	100uF 16V M	
C5305	QETN1AM-107Z	E CAPACITOR	100uF 10V M	
C5306	QETN1AM-107Z	E CAPACITOR	100uF 10V M	
C5307	QETN1CM-107Z	E CAPACITOR	100uF 16V M	
C5308	QETN1CM-107Z	E CAPACITOR	100uF 16V M	
C5310	QETN1HM-225Z	E CAPACITOR	2.2uF 50V M	
C5311	QETN1AM-107Z	E CAPACITOR	100uF 10V M	
C5312	QETN1AM-107Z	E CAPACITOR	100uF 10V M	
C5313	NCB21HK-471X	C CAPACITOR	470pF 50V K	
C5314	QETN1AM-107Z	E CAPACITOR	100uF 10V M	
C5315	NCB21HK-103X	C CAPACITOR	0.01uF 50V K	
R5101	QRG02GJ-683	OMF RESISTOR	68kΩ 2W J	
R5102	NRSA02J-122X	MG RESISTOR	1.2kΩ 1/10W J	
R5103	QRE141J-684Y	C RESISTOR	680kΩ 1/4W J	
R5104	NRSA02J-102X	MG RESISTOR	1kΩ 1/10W J	
R5105	QRE141J-680Y	C RESISTOR	68Ω 1/4W J	
R5106	QRE141J-392Y	C RESISTOR	3.9kΩ 1/4W J	
R5107	NRSA02J-681X	MG RESISTOR	680Ω 1/10W J	
R5108	QRT01DJ-R33X	MF RESISTOR	0.33Ω 1W J	
⚠ R5109	QRZ9005-470X	FUSI RESISTOR	47Ω 1/4W G	
R5301	NRSA02J-221X	MG RESISTOR	220Ω 1/10W J	
R5302	NRSA02J-472X	MG RESISTOR	4.7kΩ 1/10W J	
R5303	NRVA02D-152X	CMF RESISTOR	1.5kΩ 1/10W D	
R5304	NRVA02D-682X	CMF RESISTOR	6.8kΩ 1/10W D	
R5305	NRVA02D-243X	CMF RESISTOR	24kΩ 1/10W D	
R5306	NRVA02D-392X	CMF RESISTOR	3.9kΩ 1/10W D	
R5308	NRSA02J-122X	MG RESISTOR	1.2kΩ 1/10W J	
R5309	NRSA02J-102X	MG RESISTOR	1kΩ 1/10W J	
R5312	NRSA02J-103X	MG RESISTOR	10kΩ 1/10W J	
R5313	NRSA02J-103X	MG RESISTOR	10kΩ 1/10W J	
R5314	NRSA02J-471X	MG RESISTOR	470Ω 1/10W J	
R5315	QRE121J-820Y	C RESISTOR	82Ω 1/2W J	
R5316	NRSA02J-103X	MG RESISTOR	10kΩ 1/10W J	
R5317	NRSA02J-102X	MG RESISTOR	1kΩ 1/10W J	
R5318	NRVA02D-302X	CMF RESISTOR	3kΩ 1/10W D	

MODEL	MARK	MODEL	MARK
DR-MV1BEK	A	DR-MV1SEK	D
DR-MV1BEU	B	DR-MV1SEU	E
DR-MV1SEF	C		

⚠ Symbol No.	Part No.	Part Name	Description	Local
R5319	NRVA02D-472X	CMF RESISTOR	4.7kΩ 1/10W D	
R5325	QRE141J-8R2Y	C RESISTOR	8.2Ω 1/4W J	
⚠ R5326	QRZ9005-470X	FUSI RESISTOR	47Ω 1/4W G	
R5327	NRSA02J-103X	MG RESISTOR	10kΩ 1/10W J	
R5328	NRSA02J-471X	MG RESISTOR	470Ω 1/10W J	
R5329	NRSA02J-103X	MG RESISTOR	10kΩ 1/10W J	
R5330	NRSA02J-471X	MG RESISTOR	470Ω 1/10W J	
L5201	PELN1184	CHOKE COIL		
L5202	PELN1184	CHOKE COIL		
L5204	PELN1184	CHOKE COIL		
L5205	PELN1184	CHOKE COIL		
L5206	PELN1184	CHOKE COIL		
L5207	PELN1184	CHOKE COIL		
⚠ T5001	QQS0263-001	SW TRANSF		
B5301	NRSA02J-0R0X	MG RESISTOR	0Ω 1/10W J	
B5305	NRSA02J-0R0X	MG RESISTOR	0Ω 1/10W J	
⚠ CN5001	QGA7901C3-02	CONNECTOR	W-B (1-2)	
CN5301	QGB1231L1-15	CONNECTOR	B-B (1-15)	
CN5302	QGA2001C1-02	CONNECTOR	W-B (1-2)	
CN5303	QGA2501C1-04	CONNECTOR	W-B (1-4)	
CN5304	QGB1231L1-15	CONNECTOR	B-B (1-15)	
⚠ CP5301	QMFZ049-1R5Z-E	FUSE	1.5A 125V	
⚠ F5001	QMF51E2-2R0-J1	FUSE	2A AC250V	
FC5001	QNG0020-001Z	FUSE CLIP		
FC5002	QNG0020-001Z	FUSE CLIP		
HS1	PEME0889-01-01	HEAT SINK		
⚠ LF5002	QQR1031-001	LINE FILTER		
OT1	QYTDST3010Z	TAP SCREW	M3 x 10mm IC5101	
W5501	NRSA02J-0R0X	MG RESISTOR	0Ω 1/10W J	

Digital board

Block No. [0][2]

⚠ Symbol No.	Part No.	Part Name	Description	Local
PW1	LPA10236-06B	DIGITAL BOARD ASSY		
IC1001	JCP8059	IC		
IC1002	HY57V161610ET-8	IC		
IC1002 or	K4S161622H-TC80	IC		
IC1002 or	MT48LC1M16A1TG8	IC		
IC1002 or	HY57V161610ETP7	IC		
IC1002 or	MT48LC1M16TG-7S	IC		
IC1201	LPN0889-001C	IC(FLASH)	(SERVICE)	
IC1202	SN74LVC373APW-X	IC(DIGITAL)		
IC1203	SN74LVC373APW-X	IC(DIGITAL)		
IC1401	DMN8652-B0	IC(DIGITAL)		
IC1404	SN74HCT08APW-X	IC		
IC1405	SN74LV08APW-X	IC		
IC1601	HY5DU561622CT-J	IC		
IC1602	HY5DU561622CT-J	IC		
IC1701	PQ015YZ01Z-X	IC		
IC1801	TSB41AB2PAP	IC		
Q1002	2SA1037AK/QR/-X	TRANSISTOR		
Q1002 or	2SA1530A/QR/-X	TRANSISTOR		
Q1002 or	2SB709A/QR/-X	TRANSISTOR		
Q1003	2SA1037AK/QR/-X	TRANSISTOR		
Q1003 or	2SA1530A/QR/-X	TRANSISTOR		
Q1003 or	2SB709A/QR/-X	TRANSISTOR		
Q1004	2SA1037AK/QR/-X	TRANSISTOR		
Q1004 or	2SA1530A/QR/-X	TRANSISTOR		
Q1004 or	2SB709A/QR/-X	TRANSISTOR		
Q1005	2SA1037AK/QR/-X	TRANSISTOR		
Q1005 or	2SA1530A/QR/-X	TRANSISTOR		
Q1005 or	2SB709A/QR/-X	TRANSISTOR		
Q1006	2SA1037AK/QR/-X	TRANSISTOR		
Q1006 or	2SA1530A/QR/-X	TRANSISTOR		
Q1006 or	2SB709A/QR/-X	TRANSISTOR		
Q1007	2SA1037AK/QR/-X	TRANSISTOR		
Q1007 or	2SA1530A/QR/-X	TRANSISTOR		
Q1007 or	2SB709A/QR/-X	TRANSISTOR		
Q1008	UMZ1N-W	PAIR TRANSISTOR		
Q1008 or	BC847PN-X	PAIR TRANSISTOR		
Q1008 or	BC846PN-X	PAIR TRANSISTOR		
Q1009	2SC2412K/QRS/-X	TRANSISTOR		
Q1009 or	2SC3928A/QRS/-X	TRANSISTOR		
Q1009 or	2SD601A/QRS/-X	TRANSISTOR		
Q1010	2SC2412K/QRS/-X	TRANSISTOR		
Q1010 or	2SC3928A/QRS/-X	TRANSISTOR		
Q1010 or	2SD601A/QRS/-X	TRANSISTOR		
Q1011	2SC2412K/QRS/-X	TRANSISTOR		
Q1011 or	2SC3928A/QRS/-X	TRANSISTOR		
Q1011 or	2SD601A/QRS/-X	TRANSISTOR		
D1001	1SS355-X	SI DIODE		
D1001 or	MA111-X	SI DIODE		
D1002	1SS355-X	SI DIODE		
D1002 or	MA111-X	SI DIODE		
D1401	1SS355-X	SI DIODE		
D1401 or	MA111-X	SI DIODE		
D1402	1SS355-X	SI DIODE		
D1402 or	MA111-X	SI DIODE		
D1403	1SS355-X	SI DIODE		
D1403 or	MA111-X	SI DIODE		
C1001	NBE20JM-226X	TA E CAPACITOR	22uF 6.3V M	
C1002	NBE20JM-106X	TA E CAPACITOR	10uF 6.3V M	
C1003	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C1004	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C1005	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C1007	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C1008	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C1009	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C1012	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C1014	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C1015	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C1017	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C1018	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C1019	NCB31EK-103X	C CAPACITOR	0.01uF 25V K	
C1020	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C1026	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C1030	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C1032	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C1033	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C1034	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C1035	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C1036	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C1038	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C1039	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C1041	NBE20JM-106X	TA E CAPACITOR	10uF 6.3V M	
C1042	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C1043	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C1044	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C1045	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C1046	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C1047	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C1051	NBE20JM-106X	TA E CAPACITOR	10uF 6.3V M	
C1052	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C1053	NCB31EK-103X	C CAPACITOR	0.01uF 25V K	
C1054	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C1055	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C1056	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C1057	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C1059	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C1060	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C1061	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C1062	NCB31EK-103X	C CAPACITOR	0.01uF 25V K	
C1065	NCB20JM-475X	C CAPACITOR	4.7uF 6.3V M	
C1077	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C1089	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C1090	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C1091	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C1092	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C1093	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C1094	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C1095	NBE20JM-106X	TA E CAPACITOR	10uF 6.3V M	
C1096	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C1097	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C1098	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	

MODEL	MARK	MODEL	MARK
DR-MV1BEK	A	DR-MV1SEK	D
DR-MV1BEU	B	DR-MV1SEU	E
DR-MV1SEF	C		

⚠ Symbol No.	Part No.	Part Name	Description	Local
C1203	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C1204	NEH90JM-476X	E CAPACITOR	47uF 6.3V M	
C1206	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C1207	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C1401	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C1402	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C1403	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C1404	NEH90JM-107X	E CAPACITOR	100uF 6.3V M	
C1405	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C1406	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C1407	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C1408	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C1409	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C1410	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C1411	NEH90JM-107X	E CAPACITOR	100uF 6.3V M	
C1412	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C1413	NEH90JM-107X	E CAPACITOR	100uF 6.3V M	
C1414	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C1416	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C1417	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C1418	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C1420	NBE20JM-106X	TA E CAPACITOR	10uF 6.3V M	
C1421	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C1422	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C1423	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C1424	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C1425	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C1426	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C1427	NBE20JM-106X	TA E CAPACITOR	10uF 6.3V M	
C1428	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C1429	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C1430	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C1431	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C1432	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C1433	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C1435	NBE20JM-106X	TA E CAPACITOR	10uF 6.3V M	
C1436	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C1437	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C1438	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C1439	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C1440	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C1441	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C1442	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C1443	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C1444	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C1445	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C1446	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C1447	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C1448	NCB31EK-103X	C CAPACITOR	0.01uF 25V K	
C1449	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C1450	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C1452	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C1453	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C1455	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C1457	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C1458	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C1601	NBAD0GM-227X	OS E CAPACITOR	220uF 2.5V M	
C1602	NBAD0GM-227X	OS E CAPACITOR	220uF 2.5V M	
C1605	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C1606	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C1607	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C1608	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C1609	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C1610	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C1611	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C1612	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C1613	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C1614	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C1615	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C1616	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C1617	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C1618	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C1619	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C1620	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C1621	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C1622	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C1623	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C1624	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	

⚠ Symbol No.	Part No.	Part Name	Description	Local
C1625	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C1638	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C1640	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C1642	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C1644	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C1646	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C1648	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C1650	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C1652	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C1654	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C1656	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C1658	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C1701	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C1702	NEH90JM-107X	E CAPACITOR	100uF 6.3V M	
C1703	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C1704	NEH90JM-107X	E CAPACITOR	100uF 6.3V M	
C1706	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C1707	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C1708	NBE40JM-476X	TA E CAPACITOR	47uF 6.3V M	
C1710	NBE40JM-476X	TA E CAPACITOR	47uF 6.3V M	
C1801	NCB30JK-105X	C CAPACITOR	1uF 6.3V K	
C1802	NDC31HJ-271X	C CAPACITOR	270pF 50V J	
C1803	NBE20JM-106X	TA E CAPACITOR	10uF 6.3V M	
C1804	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C1805	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C1806	NBE20JM-106X	TA E CAPACITOR	10uF 6.3V M	
C1807	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C1808	NDC31HJ-120X	C CAPACITOR	12pF 50V J	
C1809	NDC31HJ-120X	C CAPACITOR	12pF 50V J	
C1811	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C1812	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C2201	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C2202	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
R1001	NRSA63D-221X	MG RESISTOR	220Ω 1/16W D	
R1002	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
R1003	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
R1004	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
R1005	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J	
R1006	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
R1007	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J	
R1009	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J	
R1012	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
R1013	NRSA02J-0R0X	MG RESISTOR	0Ω 1/10W J	
R1014	NRSA02J-0R0X	MG RESISTOR	0Ω 1/10W J	
R1015	NRSA02J-0R0X	MG RESISTOR	0Ω 1/10W J	
R1017	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
R1018	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
R1019	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
R1021	NRSA63D-332X	MG RESISTOR	3.3kΩ 1/16W D	
R1022	NRSA63D-152X	MG RESISTOR	1.5kΩ 1/16W D	
R1024	NRSA63D-272X	MG RESISTOR	2.7kΩ 1/16W D	
R1027	NRSA63J-272X	MG RESISTOR	2.7kΩ 1/16W J	
R1028	NRSA63J-272X	MG RESISTOR	2.7kΩ 1/16W J	
R1029	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
R1030	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J	
R1031	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J	
R1032	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J	
R1033	NRSA63J-471X	MG RESISTOR	470Ω 1/16W J	
R1035	NQR0129-002X	FERRITE BEADS		
R1036	NRSA63J-102X	MG RESISTOR	1kΩ 1/16W J	
R1037	NRSA63D-101X	MG RESISTOR	100Ω 1/16W D	
R1038	NQR0129-002X	FERRITE BEADS		
R1039	NRSA63J-102X	MG RESISTOR	1kΩ 1/16W J	
R1040	NRSA63D-101X	MG RESISTOR	100Ω 1/16W D	
R1041	NQR0129-002X	FERRITE BEADS		
R1042	NRSA63J-102X	MG RESISTOR	1kΩ 1/16W J	
R1043	NRSA63D-151X	MG RESISTOR	150Ω 1/16W D	
R1044	NQR0129-002X	FERRITE BEADS		
R1045	NRSA63J-102X	MG RESISTOR	1kΩ 1/16W J	
R1046	NRSA63J-332X	MG RESISTOR	3.3kΩ 1/16W J	
R1047	NRSA63D-201X	MG RESISTOR	200Ω 1/16W D	
R1048	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
R1049	NRSA63J-102X	MG RESISTOR	1kΩ 1/16W J	
R1050	NRSA63J-152X	MG RESISTOR	1.5kΩ 1/16W J	
R1051	NRSA63D-271X	MG RESISTOR	270Ω 1/16W D	
R1052	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
R1053	NRSA63J-102X	MG RESISTOR	1kΩ 1/16W J	

MODEL	MARK	MODEL	MARK
DR-MV1BEK	A	DR-MV1SEK	D
DR-MV1BEU	B	DR-MV1SEU	E
DR-MV1SEF	C		

⚠ Symbol No.	Part No.	Part Name	Description	Local
R1054	NRSA63D-332X	MG RESISTOR	3.3kΩ 1/16W D	
R1055	NRSA63D-181X	MG RESISTOR	180Ω 1/16W D	
R1056	NRSA63J-222X	MG RESISTOR	2.2kΩ 1/16W J	
R1057	NRSA63J-330X	MG RESISTOR	33Ω 1/16W J	
R1059	NRSA63J-471X	MG RESISTOR	470Ω 1/16W J	
R1060	NRSA63J-223X	MG RESISTOR	22kΩ 1/16W J	
R1061	NRSA63J-223X	MG RESISTOR	22kΩ 1/16W J	
R1065	NRSA63J-121X	MG RESISTOR	120Ω 1/16W J	
R1066	NRSA63J-101X	MG RESISTOR	100Ω 1/16W J	
R1067	NRSA63J-121X	MG RESISTOR	120Ω 1/16W J	
R1068	NRSA63D-222X	MG RESISTOR	2.2kΩ 1/16W D	
R1069	NRSA63D-222X	MG RESISTOR	2.2kΩ 1/16W D	
R1070	NRSA63D-122X	MG RESISTOR	1.2kΩ 1/16W D	
R1071	NRSA63D-152X	MG RESISTOR	1.5kΩ 1/16W D	
R1072	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
R1216	NRSA63J-101X	MG RESISTOR	100Ω 1/16W J	
R1217	NRSA63J-101X	MG RESISTOR	100Ω 1/16W J	
R1218	NRSA63J-101X	MG RESISTOR	100Ω 1/16W J	
R1219	NRSA63J-101X	MG RESISTOR	100Ω 1/16W J	
R1220	NRSA63J-101X	MG RESISTOR	100Ω 1/16W J	
R1221	NRSA63J-101X	MG RESISTOR	100Ω 1/16W J	
R1222	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
R1223	NRSA63J-472X	MG RESISTOR	4.7kΩ 1/16W J	
R1224	NRSA63J-472X	MG RESISTOR	4.7kΩ 1/16W J	
R1225	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J	
R1226	NRSA63J-472X	MG RESISTOR	4.7kΩ 1/16W J	
R1227	NRSA63J-101X	MG RESISTOR	100Ω 1/16W J	
R1228	NRSA63J-101X	MG RESISTOR	100Ω 1/16W J	
R1229	NRSA63J-472X	MG RESISTOR	4.7kΩ 1/16W J	
R1230	NRSA63J-472X	MG RESISTOR	4.7kΩ 1/16W J	
R1231	NRSA63J-472X	MG RESISTOR	4.7kΩ 1/16W J	
R1401	NRSA63F-1181X	MG RESISTOR	1.18kΩ 1/16W F	
R1402	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
R1408	NRSA63J-102X	MG RESISTOR	1kΩ 1/16W J	
R1409	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J	
R1410	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J	
R1411	NRSA63J-101X	MG RESISTOR	100Ω 1/16W J	
R1412	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J	
R1413	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J	
R1414	NRSA63J-102X	MG RESISTOR	1kΩ 1/16W J	
R1415	NRSA63J-102X	MG RESISTOR	1kΩ 1/16W J	
R1416	NRSA63J-102X	MG RESISTOR	1kΩ 1/16W J	
R1417	NRSA63J-102X	MG RESISTOR	1kΩ 1/16W J	
R1419	NRSA63J-101X	MG RESISTOR	100Ω 1/16W J	
R1420	NRSA63J-101X	MG RESISTOR	100Ω 1/16W J	
R1427	NRSA63J-101X	MG RESISTOR	100Ω 1/16W J	
R1428	NRSA63J-101X	MG RESISTOR	100Ω 1/16W J	
R1429	NRSA63J-101X	MG RESISTOR	100Ω 1/16W J	
R1430	NRSA63J-101X	MG RESISTOR	100Ω 1/16W J	
R1431	NRSA63J-101X	MG RESISTOR	100Ω 1/16W J	
R1434	NRSA63J-101X	MG RESISTOR	100Ω 1/16W J	
R1435	NRSA63J-101X	MG RESISTOR	100Ω 1/16W J	
R1436	NRSA63J-101X	MG RESISTOR	100Ω 1/16W J	
R1437	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
R1438	NRSA63J-101X	MG RESISTOR	100Ω 1/16W J	
R1439	NRSA63J-101X	MG RESISTOR	100Ω 1/16W J	
R1440	NRSA63J-101X	MG RESISTOR	100Ω 1/16W J	
R1441	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J	
R1443	NRSA63J-472X	MG RESISTOR	4.7kΩ 1/16W J	
R1444	NRSA63J-472X	MG RESISTOR	4.7kΩ 1/16W J	
R1445	NRSA63J-101X	MG RESISTOR	100Ω 1/16W J	
R1446	NRSA63J-101X	MG RESISTOR	100Ω 1/16W J	
R1447	NRSA63J-101X	MG RESISTOR	100Ω 1/16W J	
R1448	NRSA63J-101X	MG RESISTOR	100Ω 1/16W J	
R1449	NRSA63J-101X	MG RESISTOR	100Ω 1/16W J	
R1450	NRSA63J-101X	MG RESISTOR	100Ω 1/16W J	
R1451	NRSA63J-101X	MG RESISTOR	100Ω 1/16W J	
R1452	NRSA63J-101X	MG RESISTOR	100Ω 1/16W J	
R1453	NRSA63J-101X	MG RESISTOR	100Ω 1/16W J	
R1458	NRSA63J-101X	MG RESISTOR	100Ω 1/16W J	
R1459	NRSA63J-101X	MG RESISTOR	100Ω 1/16W J	
R1460	NRSA63J-101X	MG RESISTOR	100Ω 1/16W J	
R1461	NRSA63J-101X	MG RESISTOR	100Ω 1/16W J	
R1462	NRSA63J-101X	MG RESISTOR	100Ω 1/16W J	
R1465	NRSA63J-101X	MG RESISTOR	100Ω 1/16W J	
R1466	NRSA63J-101X	MG RESISTOR	100Ω 1/16W J	
R1467	NRSA63J-101X	MG RESISTOR	100Ω 1/16W J	
R1468	NRSA63J-101X	MG RESISTOR	100Ω 1/16W J	
R1469	NRSA63J-102X	MG RESISTOR	1kΩ 1/16W J	
R1470	NRSA63J-102X	MG RESISTOR	1kΩ 1/16W J	
R1471	NRSA63J-101X	MG RESISTOR	100Ω 1/16W J	
R1472	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
R1473	NRSA63J-101X	MG RESISTOR	100Ω 1/16W J	
R1474	NRSA63J-101X	MG RESISTOR	100Ω 1/16W J	
R1475	NRSA63J-101X	MG RESISTOR	100Ω 1/16W J	
R1476	NRSA63J-101X	MG RESISTOR	100Ω 1/16W J	
R1477	NRSA63J-101X	MG RESISTOR	100Ω 1/16W J	
R1478	NRSA63J-101X	MG RESISTOR	100Ω 1/16W J	
R1479	NRSA63J-101X	MG RESISTOR	100Ω 1/16W J	
R1480	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
R1481	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
R1482	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
R1491	NRSA63J-102X	MG RESISTOR	1kΩ 1/16W J	
R1493	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
R1496	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J	
R1497	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J	
R1498	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J	
R1601	NRSA63J-100X	MG RESISTOR	10Ω 1/16W J	
R1602	NRSA63J-100X	MG RESISTOR	10Ω 1/16W J	
R1603	NRSA63J-100X	MG RESISTOR	10Ω 1/16W J	
R1604	NRSA63J-100X	MG RESISTOR	10Ω 1/16W J	
R1605	NRSA63J-470X	MG RESISTOR	47Ω 1/16W J	
R1606	NRSA63J-470X	MG RESISTOR	47Ω 1/16W J	
R1607	NRSA63J-470X	MG RESISTOR	47Ω 1/16W J	
R1608	NRSA63J-470X	MG RESISTOR	47Ω 1/16W J	
R1613	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
R1614	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
R1615	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
R1616	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
R1617	NRSA63J-270X	MG RESISTOR	27Ω 1/16W J	
R1618	NRSA63J-270X	MG RESISTOR	27Ω 1/16W J	
R1619	NRSA63J-101X	MG RESISTOR	100Ω 1/16W J	
R1620	NRSA63J-101X	MG RESISTOR	100Ω 1/16W J	
R1621	NRSA63J-270X	MG RESISTOR	27Ω 1/16W J	
R1622	NRSA63J-270X	MG RESISTOR	27Ω 1/16W J	
R1623	NRSA63J-270X	MG RESISTOR	27Ω 1/16W J	
R1624	NRSA63J-270X	MG RESISTOR	27Ω 1/16W J	
R1625	NRSA63J-101X	MG RESISTOR	100Ω 1/16W J	
R1626	NRSA63J-101X	MG RESISTOR	100Ω 1/16W J	
R1627	NRSA63J-270X	MG RESISTOR	27Ω 1/16W J	
R1628	NRSA63J-270X	MG RESISTOR	27Ω 1/16W J	
R1642	NRSA63J-100X	MG RESISTOR	10Ω 1/16W J	
R1644	NRSA63J-470X	MG RESISTOR	47Ω 1/16W J	
R1649	NRSA63J-101X	MG RESISTOR	100Ω 1/16W J	
R1650	NRSA63J-101X	MG RESISTOR	100Ω 1/16W J	
R1651	NRSA63J-101X	MG RESISTOR	100Ω 1/16W J	
R1652	NRSA63J-101X	MG RESISTOR	100Ω 1/16W J	
R1653	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
R1654	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
R1655	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
R1656	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
R1657	NRSA63J-220X	MG RESISTOR	22Ω 1/16W J	
R1658	NRSA63J-220X	MG RESISTOR	22Ω 1/16W J	
R1659	NRSA63J-220X	MG RESISTOR	22Ω 1/16W J	
R1660	NRSA63J-220X	MG RESISTOR	22Ω 1/16W J	
R1701	NRSA63J-271X	MG RESISTOR	270Ω 1/16W J	
R1702	NRSA63J-102X	MG RESISTOR	1kΩ 1/16W J	
R1703	NRSA63D-222X	MG RESISTOR	2.2kΩ 1/16W D	
R1704	NRSA63D-222X	MG RESISTOR	2.2kΩ 1/16W D	
R1801	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
R1802	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
R1803	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J	
R1804	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J	
R1805	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
R1807	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J	
R1809	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J	
R1810	NRSA63J-394X	MG RESISTOR	390kΩ 1/16W J	
R1812	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
R1813	NRSA63J-560X	MG RESISTOR	56Ω 1/16W J	
R1814	NRSA63J-560X	MG RESISTOR	56Ω 1/16W J	
R1815	NRSA63J-560X	MG RESISTOR	56Ω 1/16W J	
R1816	NRSA63J-560X	MG RESISTOR	56Ω 1/16W J	
R1817	NRSA63J-512X	MG RESISTOR	5.1kΩ 1/16W J	
R1818	NRSA63D-562X	MG RESISTOR	5.6kΩ 1/16W D	
R1819	NRSA63D-751X	MG RESISTOR	750Ω 1/16W D	
R1820	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J	

MODEL	MARK	MODEL	MARK
DR-MV1BEK	A	DR-MV1SEK	D
DR-MV1BEU	B	DR-MV1SEU	E
DR-MV1SEF	C		

⚠ Symbol No.	Part No.	Part Name	Description	Local
R1821	NRSA63J-102X	MG RESISTOR	1kΩ 1/16W J	
R1822	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
R2201	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J	
R2202	NRSA63J-562X	MG RESISTOR	5.6kΩ 1/16W J	
R2203	NRSA63J-472X	MG RESISTOR	4.7kΩ 1/16W J	
R2204	NRSA63J-330X	MG RESISTOR	33Ω 1/16W J	
R2205	NRSA63J-820X	MG RESISTOR	82Ω 1/16W J	
R2206	NRSA63J-220X	MG RESISTOR	22Ω 1/16W J	
R2207	NRSA63J-220X	MG RESISTOR	22Ω 1/16W J	
R2208	NRSA63J-820X	MG RESISTOR	82Ω 1/16W J	
R2209	NRSA63J-220X	MG RESISTOR	22Ω 1/16W J	
R2210	NRSA63J-820X	MG RESISTOR	82Ω 1/16W J	
R2211	NRSA63J-330X	MG RESISTOR	33Ω 1/16W J	
R2212	NRSA63J-330X	MG RESISTOR	33Ω 1/16W J	
R2213	NRSA63J-330X	MG RESISTOR	33Ω 1/16W J	
R2214	NRSA63J-330X	MG RESISTOR	33Ω 1/16W J	
R2215	NRSA63J-330X	MG RESISTOR	33Ω 1/16W J	
RA1001	NRZ0040-0R0X	NET RESISTOR	0Ω 1/16W J x4	
RA1002	NRZ0040-0R0X	NET RESISTOR	0Ω 1/16W J x4	
RA1003	NRZ0034-103W	NET RESISTOR	10kΩ 1/32W J	
RA1004	NRZ0034-103W	NET RESISTOR	10kΩ 1/32W J	
RA1005	NRZ0034-103W	NET RESISTOR	10kΩ 1/32W J	
RA1006	NRZ0034-103W	NET RESISTOR	10kΩ 1/32W J	
RA1201	NRZ0034-103W	NET RESISTOR	10kΩ 1/32W J	
RA1202	NRZ0034-103W	NET RESISTOR	10kΩ 1/32W J	
RA1203	NRZ0034-103W	NET RESISTOR	10kΩ 1/32W J	
RA1204	NRZ0034-103W	NET RESISTOR	10kΩ 1/32W J	
RA1401	NRZ0040-101X	NET RESISTOR	100Ω 1/16W J x4	
RA1402	NRZ0040-101X	NET RESISTOR	100Ω 1/16W J x4	
RA1403	NRZ0040-101X	NET RESISTOR	100Ω 1/16W J x4	
RA1404	NRZ0040-101X	NET RESISTOR	100Ω 1/16W J x4	
RA1405	NRZ0034-101W	NET RESISTOR	100Ω 1/32W J	
RA1406	NRZ0034-101W	NET RESISTOR	100Ω 1/32W J	
RA1407	NRZ0034-101W	NET RESISTOR	100Ω 1/32W J	
RA1408	NRZ0034-101W	NET RESISTOR	100Ω 1/32W J	
RA1409	NRZ0034-101W	NET RESISTOR	100Ω 1/32W J	
RA1410	NRZ0034-101W	NET RESISTOR	100Ω 1/32W J	
RA1411	NRZ0034-101W	NET RESISTOR	100Ω 1/32W J	
RA1601	NRZ0040-101X	NET RESISTOR	100Ω 1/16W J x4	
RA1602	NRZ0040-101X	NET RESISTOR	100Ω 1/16W J x4	
RA1603	NRZ0040-101X	NET RESISTOR	100Ω 1/16W J x4	
RA1604	NRZ0040-101X	NET RESISTOR	100Ω 1/16W J x4	
RA1605	NRZ0040-101X	NET RESISTOR	100Ω 1/16W J x4	
RA1606	NRZ0040-101X	NET RESISTOR	100Ω 1/16W J x4	
RA1607	NRZ0040-101X	NET RESISTOR	100Ω 1/16W J x4	
RA1608	NRZ0040-101X	NET RESISTOR	100Ω 1/16W J x4	
RA1609	NRZ0040-220X	NET RESISTOR	22Ω 1/16W J x4	
RA1610	NRZ0040-220X	NET RESISTOR	22Ω 1/16W J x4	
RA1611	NRZ0040-220X	NET RESISTOR	22Ω 1/16W J x4	
RA1612	NRZ0040-220X	NET RESISTOR	22Ω 1/16W J x4	
RA1613	NRZ0040-220X	NET RESISTOR	22Ω 1/16W J x4	
RA1614	NRZ0040-220X	NET RESISTOR	22Ω 1/16W J x4	
RA1615	NRZ0040-220X	NET RESISTOR	22Ω 1/16W J x4	
RA1616	NRZ0040-220X	NET RESISTOR	22Ω 1/16W J x4	
RA1617	NRZ0040-101X	NET RESISTOR	100Ω 1/16W J x4	
RA1618	NRZ0040-101X	NET RESISTOR	100Ω 1/16W J x4	
RA1619	NRZ0040-101X	NET RESISTOR	100Ω 1/16W J x4	
RA1620	NRZ0040-101X	NET RESISTOR	100Ω 1/16W J x4	
RA1621	NRZ0040-101X	NET RESISTOR	100Ω 1/16W J x4	
RA1622	NRZ0040-101X	NET RESISTOR	100Ω 1/16W J x4	
RA1623	NRZ0040-101X	NET RESISTOR	100Ω 1/16W J x4	
RA1624	NRZ0040-101X	NET RESISTOR	100Ω 1/16W J x4	
RA1625	NRZ0040-100X	NET RESISTOR	10Ω 1/16W J x4	
RA1626	NRZ0040-100X	NET RESISTOR	10Ω 1/16W J x4	
RA1627	NRZ0040-100X	NET RESISTOR	10Ω 1/16W J x4	
RA1628	NRZ0040-100X	NET RESISTOR	10Ω 1/16W J x4	
RA1629	NRZ0040-470X	NET RESISTOR	47Ω 1/16W J x4	
RA1630	NRZ0040-470X	NET RESISTOR	47Ω 1/16W J x4	
RA1631	NRZ0040-470X	NET RESISTOR	47Ω 1/16W J x4	
RA1632	NRZ0040-470X	NET RESISTOR	47Ω 1/16W J x4	
RA1801	NRZ0034-103W	NET RESISTOR	10kΩ 1/32W J	
RA1802	NRZ0034-103W	NET RESISTOR	10kΩ 1/32W J	
RA2201	NRZ0040-0R0X	NET RESISTOR	0Ω 1/16W J x4	
RA2202	NRZ0040-0R0X	NET RESISTOR	0Ω 1/16W J x4	
RA2203	NRZ0040-0R0X	NET RESISTOR	0Ω 1/16W J x4	
RA2204	NRZ0040-0R0X	NET RESISTOR	0Ω 1/16W J x4	
RA2205	NRZ0040-0R0X	NET RESISTOR	0Ω 1/16W J x4	
RA2206	NRZ0040-0R0X	NET RESISTOR	0Ω 1/16W J x4	
RA2207	NRZ0040-0R0X	NET RESISTOR	0Ω 1/16W J x4	
RA2208	NRZ0040-330X	NET RESISTOR	33Ω 1/16W J x4	
RA2209	NRZ0040-330X	NET RESISTOR	33Ω 1/16W J x4	
RA2210	NRZ0040-330X	NET RESISTOR	33Ω 1/16W J x4	
RA2211	NRZ0040-330X	NET RESISTOR	33Ω 1/16W J x4	
L1004	NQL144K-100X	P COIL	0.30Ω 10uH K	
L1801	NQL144K-100X	P COIL	0.30Ω 10uH K	
T1801	NQR0444-001X	CHOKE COIL		
B1001	NRSA02J-0R0X	MG RESISTOR	0Ω 1/10W J	
B1007	NRSA02J-0R0X	MG RESISTOR	0Ω 1/10W J	
B1008	NQR0339-001X	FERRITE BEADS		
B1204	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
B1208	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
B1802	NRSA02J-0R0X	MG RESISTOR	0Ω 1/10W J	
CN1001	QGB2027L6-28X	CONNECTOR	B-B (1-28)	
CN1002	QGB2027L6-28X	CONNECTOR	B-B (1-28)	
CN1403	QGF1016C2-04W	CONNECTOR	FFC/FPC (1-4)	
CN1404	QGF1016F2-04W	CONNECTOR	FFC/FPC (1-4)	
CN1801	QGB2027L1-10X	CONNECTOR	B-B (1-10)	
CN2201	QGF0539C1-40W	CONNECTOR	FFC/FPC (1-40)	
K1001	NQR0339-001X	FERRITE BEADS		
K1002	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
K1003	NQR0129-002X	FERRITE BEADS		
K1004	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
K1005	NQR0129-002X	FERRITE BEADS		
K1006	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
K1007	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
K1008	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
K1009	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
K1010	NQR0129-002X	FERRITE BEADS		
K1011	NQR0129-002X	FERRITE BEADS		
K1012	NQR0129-002X	FERRITE BEADS		
K1013	NQR0129-002X	FERRITE BEADS		
K1014	NQR0129-002X	FERRITE BEADS		
K1015	NQR0129-002X	FERRITE BEADS		
K1016	NQR0129-002X	FERRITE BEADS		
K1017	NQR0129-002X	FERRITE BEADS		
K1018	NQR0129-002X	FERRITE BEADS		
K1019	NRSA02J-0R0X	MG RESISTOR	0Ω 1/10W J	
K1020	NQR0129-002X	FERRITE BEADS		
K1201	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
K1401	NRSA02J-0R0X	MG RESISTOR	0Ω 1/10W J	
K1402	NRSA02J-0R0X	MG RESISTOR	0Ω 1/10W J	
K1403	NRSA02J-0R0X	MG RESISTOR	0Ω 1/10W J	
K1404	NQR0339-001X	FERRITE BEADS		
K1406	NQR0339-001X	FERRITE BEADS		
K1407	NRSA02J-0R0X	MG RESISTOR	0Ω 1/10W J	
K1408	NRSA02J-0R0X	MG RESISTOR	0Ω 1/10W J	
K1701	NRSA02J-0R0X	MG RESISTOR	0Ω 1/10W J	
K1702	NRSA02J-0R0X	MG RESISTOR	0Ω 1/10W J	
K1801	NRSA02J-0R0X	MG RESISTOR	0Ω 1/10W J	
K2201	NQR0129-002X	FERRITE BEADS		
K2202	NQR0129-002X	FERRITE BEADS		
K2203	NQR0129-002X	FERRITE BEADS		
K2204	NQR0129-002X	FERRITE BEADS		
K2205	NQR0129-002X	FERRITE BEADS		
K2206	NQR0129-002X	FERRITE BEADS		
K2207	NQR0129-002X	FERRITE BEADS		
K2208	NQR0129-002X	FERRITE BEADS		
K2209	NQR0129-002X	FERRITE BEADS		
K2210	NQR0129-002X	FERRITE BEADS		
K2211	NQR0129-002X	FERRITE BEADS		
K2212	NQR0129-002X	FERRITE BEADS		
K2213	NQR0129-002X	FERRITE BEADS		
K2214	NQR0129-002X	FERRITE BEADS		
K2215	NQR0129-002X	FERRITE BEADS		
K2216	NQR0129-002X	FERRITE BEADS		
K2217	NQR0129-002X	FERRITE BEADS		
K2218	NQR0129-002X	FERRITE BEADS		
K2219	NQR0129-002X	FERRITE BEADS		
K2220	NQR0129-002X	FERRITE BEADS		
K2221	NQR0129-002X	FERRITE BEADS		
LC1401	NQR0415-002X	EMI FILTER	1uF 16V Z	
LC1402	NQR0415-002X	EMI FILTER	1uF 16V Z	
LC1403	NQR0415-002X	EMI FILTER	1uF 16V Z	
OT1	LC41656-001A	COOLING SHEET		

MODEL	MARK	MODEL	MARK
DR-MV1BEK	A	DR-MV1SEK	D
DR-MV1BEU	B	DR-MV1SEU	E
DR-MV1SEF	C		

⚠ Symbol No.	Part No.	Part Name	Description	Local
SD1	LP21293-001A	SHIELD FRAME(DIGITAL)		
X1401	NAX0580-001X	CXO	27.0000MHz	
X1801	NAX0666-001X	CRYSTAL	24.576000MHz	

Main board

Block No. [0][3]

⚠ Symbol No.	Part No.	Part Name	Description	Local
PW1	LPA10245-03D	MAIN BOARD ASSY		C
PW1	LPA10245-02D	MAIN BOARD ASSY		A,D
PW1	LPA10245-01D	MAIN BOARD ASSY		B,E
IC1	JCP8060-MSA	IC		
IC201	LC74776-9791	IC		
⚠ IC2201	AN3651FBP	IC		
IC2601	RC4558D-X	IC		
IC2602	BU4052BCF-X	IC		
IC2602 or	CD4052BM-X	IC		
IC2603	RC4558D-X	IC		
IC2604	BU4052BCF-X	IC		
IC2604 or	CD4052BM-X	IC		
IC2605	RC4558D-X	IC		
IC2606	LA7151	IC		
IC2607	LA7151	IC		
IC3001	HD6432194SAD75F	IC(MCU)	MASK	C
IC3001	HD6432194SAD63F	IC(MCU)	MASK	A,B,D,E
IC3002	IC-PST3427U-X	IC		
IC3004	LPN0883-003A-33	IC(EEPROM)	*(REFER TO BELOW)	C
IC3004	LPN0883-002B-32	IC(EEPROM)	*(REFER TO BELOW)	A,D
IC3004	LPN0883-001E-31	IC(EEPROM)	*(REFER TO BELOW)	B,E
IC3301	HD6432194SAD84F	IC(MCU)	MASK	C
IC3301	HD6432194SAD64F	IC(MCU)	MASK	A,B,D,E
IC3302	IC-PST3427U-X	IC		
IC3303	LPN0887-001A-10	IC(EEPROM)	*(REFER TO BELOW)	C
IC3303	LPN0882-002D-02	IC(EEPROM)	*(REFER TO BELOW)	A,D
IC3303	LPN0882-001D-11	IC(EEPROM)	*(REFER TO BELOW)	B,E
IC7101	CD74HC4053PW-X	IC		
IC7501	74VHCT08ASJ-X	IC		
Q4	2SA1037AK/QR/-X	TRANSISTOR		C
Q4	2SB709A/QR/-X	TRANSISTOR		C
Q4	2SA1530A/QR/-X	TRANSISTOR		C
Q7	2SC2412K/QRS/-X	TRANSISTOR		
Q7 or	2SD601A/QRS/-X	TRANSISTOR		
Q7 or	2SC3928A/QRS/-X	TRANSISTOR		
Q8	2SC2412K/QRS/-X	TRANSISTOR		
Q8 or	2SD601A/QRS/-X	TRANSISTOR		
Q8 or	2SC3928A/QRS/-X	TRANSISTOR		
Q9	2SC2412K/QRS/-X	TRANSISTOR		
Q9 or	2SD601A/QRS/-X	TRANSISTOR		
Q9 or	2SC3928A/QRS/-X	TRANSISTOR		
Q10	2SC2412K/QRS/-X	TRANSISTOR		
Q10 or	2SD601A/QRS/-X	TRANSISTOR		
Q10 or	2SC3928A/QRS/-X	TRANSISTOR		
Q16	2SA1037AK/QR/-X	TRANSISTOR		
Q16 or	2SB709A/QR/-X	TRANSISTOR		
Q16 or	2SA1530A/QR/-X	TRANSISTOR		
Q207	2SA1037AK/QR/-X	TRANSISTOR		
Q207 or	2SB709A/QR/-X	TRANSISTOR		
Q207 or	2SA1530A/QR/-X	TRANSISTOR		
Q208	2SC2412K/QRS/-X	TRANSISTOR		
Q208 or	2SD601A/QRS/-X	TRANSISTOR		
Q208 or	2SC3928A/QRS/-X	TRANSISTOR		
Q2001	2SC2412K/QRS/-X	TRANSISTOR		
Q2001 or	2SD601A/QRS/-X	TRANSISTOR		
Q2001 or	2SC3928A/QRS/-X	TRANSISTOR		
Q2002	2SC2412K/QRS/-X	TRANSISTOR		
Q2002 or	2SD601A/QRS/-X	TRANSISTOR		
Q2002 or	2SC3928A/QRS/-X	TRANSISTOR		
Q2003	DTA144WKA-X	TRANSISTOR		
Q2003 or	UN211E-X	DIGI TRANSISTOR		
Q2003 or	RT1P44HC-X	DIGI TRANSISTOR		
Q2051	2SC2412K/QRS/-X	TRANSISTOR		
Q2051 or	2SD601A/QRS/-X	TRANSISTOR		
Q2051 or	2SC3928A/QRS/-X	TRANSISTOR		
Q2052	2SA1037AK/QR/-X	TRANSISTOR		
Q2052 or	2SB709A/QR/-X	TRANSISTOR		
Q2052 or	2SA1530A/QR/-X	TRANSISTOR		
Q2053	DTC144WKA-X	DIGI TRANSISTOR		
Q2053 or	UN221E-X	TRANSTSTOR		
Q2053 or	RT1N44HC-X	DIGI TRANSISTOR		
Q2054	2SA1037AK/QR/-X	TRANSISTOR		
Q2054 or	2SB709A/QR/-X	TRANSISTOR		
Q2054 or	2SA1530A/QR/-X	TRANSISTOR		
Q2055	DTC144WKA-X	DIGI TRANSISTOR		
Q2055 or	UN221E-X	TRANSTSTOR		
Q2055 or	RT1N44HC-X	DIGI TRANSISTOR		
Q2201	DTA144WKA-X	TRANSISTOR		
Q2201 or	UN211E-X	DIGI TRANSISTOR		
Q2201 or	RT1P44HC-X	DIGI TRANSISTOR		
Q2202	DTC144WKA-X	DIGI TRANSISTOR		
Q2202 or	UN221E-X	TRANSTSTOR		
Q2202 or	RT1N44HC-X	DIGI TRANSISTOR		
Q2203	2SC2412K/QRS/-X	TRANSISTOR		
Q2203 or	2SD601A/QRS/-X	TRANSISTOR		
Q2203 or	2SC3928A/QRS/-X	TRANSISTOR		
Q2204	2SC2412K/QRS/-X	TRANSISTOR		
Q2204 or	2SD601A/QRS/-X	TRANSISTOR		
Q2204 or	2SC3928A/QRS/-X	TRANSISTOR		
Q2255	DTC114EKA-X	TRANSISTOR		
Q2255 or	UN2211-X	TRANSISTOR		
Q2255 or	RT1N141C-X	DIGI TRANSISTOR		
Q3004	2SC2412K/QRS/-X	TRANSISTOR		
Q3004 or	2SD601A/QRS/-X	TRANSISTOR		
Q3004 or	2SC3928A/QRS/-X	TRANSISTOR		
Q3007	UN221E-X	TRANSTSTOR		
Q3007 or	DTC144WKA-X	DIGI TRANSISTOR		
Q3007 or	RT1N44HC-X	DIGI TRANSISTOR		
Q3011	DTC114GKA-X	DIGI TRANSISTOR		
Q3011 or	DTC144GKA-X	DIGI TRANSISTOR		
Q3012	DTC114GKA-X	DIGI TRANSISTOR		
Q3012 or	DTC144GKA-X	DIGI TRANSISTOR		
Q3013	DTC114GKA-X	DIGI TRANSISTOR		
Q3013 or	DTC144GKA-X	DIGI TRANSISTOR		
Q3014	DTC114GKA-X	DIGI TRANSISTOR		
Q3014 or	DTC144GKA-X	DIGI TRANSISTOR		
Q3015	DTC114GKA-X	DIGI TRANSISTOR		
Q3015 or	DTC144GKA-X	DIGI TRANSISTOR		
Q3016	DTC114GKA-X	DIGI TRANSISTOR		
Q3016 or	DTC144GKA-X	DIGI TRANSISTOR		
Q3017	DTC114GKA-X	DIGI TRANSISTOR		
Q3017 or	DTC144GKA-X	DIGI TRANSISTOR		
Q3302	PTZ-NV16A	IC(PHOTO SENSOR)		
Q3303	PTZ-NV16A	IC(PHOTO SENSOR)		
Q3304	2SC2412K/QRS/-X	TRANSISTOR		
Q3304 or	2SD601A/QRS/-X	TRANSISTOR		
Q3304 or	2SC3928A/QRS/-X	TRANSISTOR		
Q3305	2SC2412K/QRS/-X	TRANSISTOR		
Q3305 or	2SD601A/QRS/-X	TRANSISTOR		
Q3305 or	2SC3928A/QRS/-X	TRANSISTOR		
Q3401	UN221E-X	TRANSTSTOR		
Q3401 or	DTC144WKA-X	DIGI TRANSISTOR		
Q3401 or	RT1N44HC-X	DIGI TRANSISTOR		
Q3901	UN221E-X	TRANSTSTOR		
Q3901 or	DTC144WKA-X	DIGI TRANSISTOR		
Q3901 or	RT1N44HC-X	DIGI TRANSISTOR		
Q4001	UN2211-X	TRANSISTOR		
Q4001 or	DTC114EKA-X	TRANSISTOR		
Q4001 or	RT1N141C-X	DIGI TRANSISTOR		
Q7201	2SC1317/RS/-T	TRANSISTOR		
D201	NRSA63J-152X	MG RESISTOR	1.5kΩ 1/16W J	
D202	NRSA63J-101X	MG RESISTOR	100Ω 1/16W J	
D203	NRSA63J-101X	MG RESISTOR	100Ω 1/16W J	
D2001	1SS133-T2	DIODE		
D2001 or	1SS270A-T2	SI DIODE		
D2251	1SS133-T2	DIODE		
D2251 or	1SS270A-T2	SI DIODE		
D3002	1SS133-T2	DIODE		
D3002 or	1SS270A-T2	SI DIODE		
D3003	RD39ES/B3/-T2	Z DIODE		

*The VCR goes to jig RCU mode after replacing the EEPROM and the VCR does not accept some RCU command. Therefore please set the VCR to the user RCU mode after replacing the EEPROM. The method of setting the VCR to the user RCU mode is written on the service manual.

MODEL	MARK	MODEL	MARK
DR-MV1BEK	A	DR-MV1SEK	D
DR-MV1BEU	B	DR-MV1SEU	E
DR-MV1SEF	C		

⚠ Symbol No.	Part No.	Part Name	Description	Local
D3003	or MTZJ39C-T2	Z DIODE		
D3004	1A3G-T2	SI DIODE		
D3005	1A3G-T2	SI DIODE		
D3008	1SS133-T2	DIODE		
D3008	or 1SS270A-T2	SI DIODE		
D3301	LNB2301L01VI	LED		
D3303	RD39ES/B3/-T2	Z DIODE		
D3303	or MTZJ39C-T2	Z DIODE		
D3304	1A3G-T2	SI DIODE		
D3305	1A3G-T2	SI DIODE		
D4001	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
D4002	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
D7301	1A3G-T2	SI DIODE		
PC3001	RPI-304J	IC(PHOTO SENSOR)		
PC3002	RPI-304J	IC(PHOTO SENSOR)		
C1	NDC31HJ-151X	C CAPACITOR	150pF 50V J	
C2	NDC31HJ-390X	C CAPACITOR	39pF 50V J	C
C2	NDC31HJ-470X	C CAPACITOR	47pF 50V J	A,B,D,E
C3	NDC31HJ-7R0X	C CAPACITOR	7pF 50V J	C
C4	QEKJ1EM-106Z	E CAPACITOR	10uF 25V M	
C5	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C6	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C7	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C8	NCF31AZ-105X	C CAPACITOR	1uF 10V Z	
C9	QEKJ1HM-225Z	E CAPACITOR	2.2uF 50V M	
C10	QEKJ0JM-476Z	E CAPACITOR	47uF 6.3V M	
C11	NCF31AZ-105X	C CAPACITOR	1uF 10V Z	
C12	NCF31AZ-105X	C CAPACITOR	1uF 10V Z	
C13	NCF31AZ-105X	C CAPACITOR	1uF 10V Z	
C14	NCF31AZ-105X	C CAPACITOR	1uF 10V Z	
C15	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C17	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C19	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C20	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C22	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C24	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C25	QEKJ1HM-335Z	E CAPACITOR	3.3uF 50V M	
C26	QEKJ1EM-106Z	E CAPACITOR	10uF 25V M	
C27	NCB31EK-103X	C CAPACITOR	0.01uF 25V K	
C29	NCB31EK-103X	C CAPACITOR	0.01uF 25V K	C
C30	QCBB1HK-331Y	C CAPACITOR	330pF 50V K	
C31	QEKJ0JM-476Z	E CAPACITOR	47uF 6.3V M	
C32	NCB31EK-103X	C CAPACITOR	0.01uF 25V K	
C33	QEKJ1EM-106Z	E CAPACITOR	10uF 25V M	
C34	NCB31EK-103X	C CAPACITOR	0.01uF 25V K	
C35	QCBB1HK-103Y	C CAPACITOR	0.01uF 50V K	
C36	QEKJ1HM-105Z	E CAPACITOR	1uF 50V M	
C37	NDC31HJ-4R0X	C CAPACITOR	4pF 50V J	
C38	NCB31EK-103X	C CAPACITOR	0.01uF 25V K	
C39	QEKJ0JM-476Z	E CAPACITOR	47uF 6.3V M	
C40	NCB31EK-103X	C CAPACITOR	0.01uF 25V K	
C41	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C43	QEKJ1HM-335Z	E CAPACITOR	3.3uF 50V M	
C44	QEKJ1HM-225Z	E CAPACITOR	2.2uF 50V M	
C45	NCB31EK-472X	C CAPACITOR	4700pF 25V K	
C46	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C47	QEKJ1HM-474Z	E CAPACITOR	0.47uF 50V M	
C48	NCB31EK-223X	C CAPACITOR	0.022uF 25V K	
C49	QEKJ1HM-475Z	E CAPACITOR	4.7uF 50V M	
C50	NCB31EK-103X	C CAPACITOR	0.01uF 25V K	C
C56	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C57	NCB31EK-103X	C CAPACITOR	0.01uF 25V K	
C58	NCB31EK-103X	C CAPACITOR	0.01uF 25V K	
C59	NCB31EK-103X	C CAPACITOR	0.01uF 25V K	
C60	NCB31EK-103X	C CAPACITOR	0.01uF 25V K	
C61	QEKC0JM-476Z	E CAPACITOR	47uF 6.3V M	
C62	QCBB1HK-103Y	C CAPACITOR	0.01uF 50V K	
C63	NCB31EK-103X	C CAPACITOR	0.01uF 25V K	
C64	NCB31EK-103X	C CAPACITOR	0.01uF 25V K	
C66	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	C
C71	QEKJ1HM-105Z	E CAPACITOR	1uF 50V M	
C75	NDC31HJ-390X	C CAPACITOR	39pF 50V J	C
C85	QCBB1HK-103Y	C CAPACITOR	0.01uF 50V K	
C201	QEKJ0JM-227Z	E CAPACITOR	220uF 6.3V M	
C204	NCB31EK-103X	C CAPACITOR	0.01uF 25V K	
C206	NDC31HJ-330X	C CAPACITOR	33pF 50V J	

⚠ Symbol No.	Part No.	Part Name	Description	Local
C207	NDC31HJ-330X	C CAPACITOR	33pF 50V J	
C209	NCB31AK-474X	C CAPACITOR	0.47uF 10V K	
C210	NDC31HJ-101X	C CAPACITOR	100pF 50V J	
C211	NDC31HJ-101X	C CAPACITOR	100pF 50V J	
C212	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C213	QEKJ1EM-475Z	E CAPACITOR	4.7uF 25V M	
C214	NCB31AK-224X	C CAPACITOR	0.22uF 10V K	
C215	NCB31AK-224X	C CAPACITOR	0.22uF 10V K	
C217	NDC31HJ-560X	C CAPACITOR	56pF 50V J	
C218	QEKJ1HM-105Z	E CAPACITOR	1uF 50V M	
C222	QEKJ1HM-105Z	E CAPACITOR	1uF 50V M	
C225	QEKJ0JM-227Z	E CAPACITOR	220uF 6.3V M	
C2001	QEKJ1HM-475Z	E CAPACITOR	4.7uF 50V M	
C2002	QEKJ1HM-105Z	E CAPACITOR	1uF 50V M	
C2003	QEKJ0JM-476Z	E CAPACITOR	47uF 6.3V M	
C2005	QEKJ1HM-475Z	E CAPACITOR	4.7uF 50V M	
C2006	NCB31EK-682X	C CAPACITOR	6800pF 25V K	
C2007	QEKJ1CM-226Z	E CAPACITOR	22uF 16V M	
C2008	QEKJ1HM-475Z	E CAPACITOR	4.7uF 50V M	
C2009	NCB31HK-122X	C CAPACITOR	1200pF 50V K	
C2010	NCB31HK-152X	C CAPACITOR	1500pF 50V K	
C2011	QEKJ1HM-475Z	E CAPACITOR	4.7uF 50V M	
C2012	QEKJ1HM-475Z	E CAPACITOR	4.7uF 50V M	
C2013	NDC31HJ-331X	C CAPACITOR	330pF 50V J	
C2051	NDC31HJ-331X	C CAPACITOR	330pF 50V J	
C2052	QFV61HJ-823Z	MF CAPACITOR	0.082uF 50V J	
C2053	NCB31HK-472X	C CAPACITOR	4700pF 50V K	
C2054	NCB31EK-223X	C CAPACITOR	0.022uF 25V K	
C2055	QEKJ1EM-106Z	E CAPACITOR	10uF 25V M	
C2201	QEKJ1EM-106Z	E CAPACITOR	10uF 25V M	
C2202	QEKJ1HM-475Z	E CAPACITOR	4.7uF 50V M	
C2203	QEKJ1HM-475Z	E CAPACITOR	4.7uF 50V M	
C2204	QEKJ0JM-336Z	E CAPACITOR	33uF 6.3V M	
C2205	QEKJ1EM-106Z	E CAPACITOR	10uF 25V M	
C2206	QEKJ1EM-106Z	E CAPACITOR	10uF 25V M	
C2207	NCB31EK-153X	C CAPACITOR	0.015uF 25V K	
C2208	NCB31EK-153X	C CAPACITOR	0.015uF 25V K	
C2209	QEKJ1EM-106Z	E CAPACITOR	10uF 25V M	
C2210	QEKJ1EM-106Z	E CAPACITOR	10uF 25V M	
C2211	QEKJ0JM-336Z	E CAPACITOR	33uF 6.3V M	
C2212	QEKJ0JM-476Z	E CAPACITOR	47uF 6.3V M	
C2214	QEKJ1EM-106Z	E CAPACITOR	10uF 25V M	
C2215	QEKJ1EM-106Z	E CAPACITOR	10uF 25V M	
C2216	QEKJ1CM-476Z	E CAPACITOR	47uF 16V M	
C2220	QEKJ1EM-106Z	E CAPACITOR	10uF 25V M	
C2221	NCB31EK-223X	C CAPACITOR	0.022uF 25V K	
C2222	NCB31EK-103X	C CAPACITOR	0.01uF 25V K	
C2223	NCB31CK-473X	C CAPACITOR	0.047uF 16V K	
C2224	NCB31CK-473X	C CAPACITOR	0.047uF 16V K	
C2225	NCB30JK-105X	C CAPACITOR	1uF 6.3V K	
C2226	NCB30JK-105X	C CAPACITOR	1uF 6.3V K	
C2227	QEKJ1EM-106Z	E CAPACITOR	10uF 25V M	
C2251	NCB31EK-103X	C CAPACITOR	0.01uF 25V K	
C2252	NCB31EK-103X	C CAPACITOR	0.01uF 25V K	
C2253	NCB31EK-103X	C CAPACITOR	0.01uF 25V K	
C2254	QEKJ0JM-476Z	E CAPACITOR	47uF 6.3V M	
C2255	NCB31EK-103X	C CAPACITOR	0.01uF 25V K	
C2256	NCB31EK-103X	C CAPACITOR	0.01uF 25V K	
C2257	QCBB1HK-103Y	C CAPACITOR	0.01uF 50V K	
C2258	NDC31HJ-181X	C CAPACITOR	180pF 50V J	
C2259	QEKJ1HM-334Z	E CAPACITOR	0.33uF 50V M	
C2261	NDC31HJ-101X	C CAPACITOR	100pF 50V J	
C2262	NDC31HJ-101X	C CAPACITOR	100pF 50V J	
C2601	NCB31HK-103X	C CAPACITOR	0.01uF 50V K	
C2602	NCB31HK-103X	C CAPACITOR	0.01uF 50V K	
C2603	QEKJ1EM-106Z	E CAPACITOR	10uF 25V M	
C2604	QEKJ1EM-106Z	E CAPACITOR	10uF 25V M	
C2605	QEKJ1HM-105Z	E CAPACITOR	1uF 50V M	
C2606	QEKC1HM-105Z	E CAPACITOR	1uF 50V M	
C2607	QEKC1HM-475Z	E CAPACITOR	4.7uF 50V M	
C2608	QEKC1HM-475Z	E CAPACITOR	4.7uF 50V M	
C2609	QEKC1HM-105Z	E CAPACITOR	1uF 50V M	
C2610	QEKJ1HM-105Z	E CAPACITOR	1uF 50V M	
C2611	QEKJ1EM-106Z	E CAPACITOR	10uF 25V M	
C2612	QEKC1HM-105Z	E CAPACITOR	1uF 50V M	
C2613	QEKJ1HM-105Z	E CAPACITOR	1uF 50V M	
C2614	QEKJ1HM-475Z	E CAPACITOR	4.7uF 50V M	
C2615	QEKC1HM-475Z	E CAPACITOR	4.7uF 50V M	

MODEL	MARK	MODEL	MARK
DR-MV1BEK	A	DR-MV1SEK	D
DR-MV1BEU	B	DR-MV1SEU	E
DR-MV1SEF	C		

⚠ Symbol No.	Part No.	Part Name	Description	Local
C2616	QEKJ1HM-105Z	E CAPACITOR	1uF 50V M	
C2617	QEKC1HM-105Z	E CAPACITOR	1uF 50V M	
C2618	QEKJ1EM-106Z	E CAPACITOR	10uF 25V M	
C2651	QEKJ1CM-476Z	E CAPACITOR	47uF 16V M	
C2653	QEKJ1CM-476Z	E CAPACITOR	47uF 16V M	
C3007	NCB30JK-105X	C CAPACITOR	1uF 6.3V K	
C3010	QEZ0244-22A	EDL CAPACITOR	0.22F 5.5V Z	
C3014	QEKC0JM-476Z	E CAPACITOR	47uF 6.3V M	
C3015	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C3016	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C3022	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C3024	NDC31HJ-160X	C CAPACITOR	16pF 50V J	
C3025	QAT3725-300Z	TRIM CAPACITOR	30pF TIMER CLOCK	
C3027	QEKJ1EM-106Z	E CAPACITOR	10uF 25V M	
C3030	QEKJ0JM-476Z	E CAPACITOR	47uF 6.3V M	
C3031	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C3032	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C3033	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C3036	NDC31HJ-180X	C CAPACITOR	18pF 50V J	
C3037	NDC31HJ-120X	C CAPACITOR	12pF 50V J	
C3038	QEKJ0JM-476Z	E CAPACITOR	47uF 6.3V M	
C3039	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C3042	QETN0JM-477Z	E CAPACITOR	470uF 6.3V M	
C3050	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C3054	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C3304	NCB31EK-473X	C CAPACITOR	0.047uF 25V K	
C3310	QEZ0244-229	EDL CAPACITOR	0.022F 5.5V Z	
C3312	QEKC0JM-476Z	E CAPACITOR	47uF 6.3V M	
C3315	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C3316	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C3322	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C3324	NDC31HJ-120X	C CAPACITOR	12pF 50V J	
C3327	QERF1CM-106Z	E CAPACITOR	10uF 16V M	
C3330	QERF1CM-476Z	E CAPACITOR	47uF 16V M	
C3331	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C3332	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C3333	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C3336	NDC31HJ-180X	C CAPACITOR	18pF 50V J	
C3337	NDC31HJ-120X	C CAPACITOR	12pF 50V J	
C3341	NDC31HJ-180X	C CAPACITOR	18pF 50V J	
C3342	QETJ0JM-477Z	E CAPACITOR	470uF 6.3V M	
C3350	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C3354	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C3355	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
C3371	QEKJ1HM-336Z	E CAPACITOR	33uF 50V M	
C4002	NCB31HK-103X	C CAPACITOR	0.01uF 50V K	
C4004	QERF1CM-226Z	E CAPACITOR	22uF 16V M	
C4006	QERF0JM-476Z	E CAPACITOR	47uF 6.3V M	
C4008	NCB30JK-105X	C CAPACITOR	1uF 6.3V K	
C4009	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
C4010	NCB31EK-223X	C CAPACITOR	0.022uF 25V K	
C4011	NCB31EK-104X	C CAPACITOR	0.1uF 25V K	
C4012	NCB31CK-224X	C CAPACITOR	0.22uF 16V K	
C4014	NDC31HJ-101X	C CAPACITOR	100pF 50V J	
C4015	NDC31HJ-221X	C CAPACITOR	220pF 50V J	
C4018	NCB31HK-102X	C CAPACITOR	1000pF 50V K	
C4031	QEKJ1CM-336Z	E CAPACITOR	33uF 16V M	
C7110	NCB31EK-103X	C CAPACITOR	0.01uF 25V K	
C7111	QEKJ0JM-476Z	E CAPACITOR	47uF 6.3V M	
C7112	NCB31EK-103X	C CAPACITOR	0.01uF 25V K	
C7116	NDC31HJ-470X	C CAPACITOR	47pF 50V J	
C7117	NDC31HJ-470X	C CAPACITOR	47pF 50V J	
C7118	NDC31HJ-470X	C CAPACITOR	47pF 50V J	
C7119	NDC31HJ-470X	C CAPACITOR	47pF 50V J	
C7201	QEKJ0JM-227Z	E CAPACITOR	220uF 6.3V M	
C7501	QEKJ0JM-107Z	E CAPACITOR	100uF 6.3V M	
C7502	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C7503	QEKJ1HM-475Z	E CAPACITOR	4.7uF 50V M	
C7504	NDC31HJ-151X	C CAPACITOR	150pF 50V J	
C7505	NDC31HJ-151X	C CAPACITOR	150pF 50V J	
C7506	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C7507	QEKJ0JM-107Z	E CAPACITOR	100uF 6.3V M	
C7508	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C7509	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
R1	NRSA63J-622X	MG RESISTOR	6.2kΩ 1/16W J	
R2	NRSA63J-152X	MG RESISTOR	1.5kΩ 1/16W J	
R3	NRSA63J-822X	MG RESISTOR	8.2kΩ 1/16W J	C

⚠ Symbol No.	Part No.	Part Name	Description	Local
R3	NRSA63J-472X	MG RESISTOR	4.7kΩ 1/16W J	A,B,D,E
R5	NRSA63J-821X	MG RESISTOR	820Ω 1/16W J	C
R11	NRSA63J-273X	MG RESISTOR	27kΩ 1/16W J	
R12	NRSA63J-102X	MG RESISTOR	1kΩ 1/16W J	
R17	NRSA63J-681X	MG RESISTOR	680Ω 1/16W J	C
R21	NRSA63J-222X	MG RESISTOR	2.2kΩ 1/16W J	
R22	NRSA63J-222X	MG RESISTOR	2.2kΩ 1/16W J	
R28	NRSA63J-102X	MG RESISTOR	1kΩ 1/16W J	C
R35	NRSA63J-821X	MG RESISTOR	820Ω 1/16W J	C
R36	NRSA63J-472X	MG RESISTOR	4.7kΩ 1/16W J	
R37	NRSA63J-153X	MG RESISTOR	15kΩ 1/16W J	
R38	NRSA63J-685X	MG RESISTOR	6.8MΩ 1/16W J	
R41	NRSA63J-101X	MG RESISTOR	100Ω 1/16W J	
R42	QRE141J-471Y	C RESISTOR	470Ω 1/4W J	
R43	NRSA63J-471X	MG RESISTOR	470Ω 1/16W J	
R201	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
R202	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J	
R208	NRSA63J-222X	MG RESISTOR	2.2kΩ 1/16W J	
R209	NRSA63J-682X	MG RESISTOR	6.8kΩ 1/16W J	
R210	NRSA63J-182X	MG RESISTOR	1.8kΩ 1/16W J	
R211	NRSA63J-562X	MG RESISTOR	5.6kΩ 1/16W J	
R212	NRSA63J-331X	MG RESISTOR	330Ω 1/16W J	
R213	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
R216	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J	
R224	NRSA63J-101X	MG RESISTOR	100Ω 1/16W J	
R225	NRSA63J-471X	MG RESISTOR	470Ω 1/16W J	
R226	NRSA63J-102X	MG RESISTOR	1kΩ 1/16W J	
R2003	NRSA63J-101X	MG RESISTOR	100Ω 1/16W J	
R2005	NRSA63J-153X	MG RESISTOR	15kΩ 1/16W J	
R2007	NRSA63J-183X	MG RESISTOR	18kΩ 1/16W J	
R2008	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J	
R2010	NRSA63J-123X	MG RESISTOR	12kΩ 1/16W J	
R2013	NRSA63J-123X	MG RESISTOR	12kΩ 1/16W J	
R2014	NRSA63J-394X	MG RESISTOR	390kΩ 1/16W J	
R2015	NRSA63J-331X	MG RESISTOR	330Ω 1/16W J	
R2016	NRSA63J-393X	MG RESISTOR	39kΩ 1/16W J	
R2017	NRSA63J-183X	MG RESISTOR	18kΩ 1/16W J	
R2018	NRSA63J-472X	MG RESISTOR	4.7kΩ 1/16W J	
R2019	NRSA63J-472X	MG RESISTOR	4.7kΩ 1/16W J	
R2021	NRSA63J-333X	MG RESISTOR	33kΩ 1/16W J	
R2022	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J	
R2023	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J	
R2053	NRSA63J-392X	MG RESISTOR	3.9kΩ 1/16W J	
R2054	NRSA63J-123X	MG RESISTOR	12kΩ 1/16W J	
R2055	NRSA63J-3R3X	MG RESISTOR	3.3Ω 1/16W J	
R2056	QRE141J-560Y	C RESISTOR	56Ω 1/4W J	
R2057	NRSA63J-473X	MG RESISTOR	47kΩ 1/16W J	
R2058	NRSA63J-183X	MG RESISTOR	18kΩ 1/16W J	
R2059	NRSA63J-473X	MG RESISTOR	47kΩ 1/16W J	
R2060	NRSA63J-183X	MG RESISTOR	18kΩ 1/16W J	
R2201	NRSA63J-473X	MG RESISTOR	47kΩ 1/16W J	
R2202	NRSA63J-682X	MG RESISTOR	6.8kΩ 1/16W J	
R2203	NRSA63J-473X	MG RESISTOR	47kΩ 1/16W J	
R2204	NRSA63J-682X	MG RESISTOR	6.8kΩ 1/16W J	
R2205	NRSA63J-473X	MG RESISTOR	47kΩ 1/16W J	
R2206	NRSA63J-682X	MG RESISTOR	6.8kΩ 1/16W J	
R2207	NRSA63J-473X	MG RESISTOR	47kΩ 1/16W J	
R2208	NRSA63J-682X	MG RESISTOR	6.8kΩ 1/16W J	
R2209	NRSA63J-681X	MG RESISTOR	680Ω 1/16W J	
R2210	NRSA63J-472X	MG RESISTOR	4.7kΩ 1/16W J	
R2211	NRSA63J-272X	MG RESISTOR	2.7kΩ 1/16W J	
R2212	NRSA63J-272X	MG RESISTOR	2.7kΩ 1/16W J	
R2213	NRSA63J-472X	MG RESISTOR	4.7kΩ 1/16W J	
R2214	NRSA63J-681X	MG RESISTOR	680Ω 1/16W J	
R2215	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
R2218	NRSA63J-332X	MG RESISTOR	3.3kΩ 1/16W J	
R2219	NRSA63J-122X	MG RESISTOR	1.2kΩ 1/16W J	
R2220	NRSA63J-102X	MG RESISTOR	1kΩ 1/16W J	
R2222	NRSA63J-472X	MG RESISTOR	4.7kΩ 1/16W J	
R2223	NRSA63J-511X	MG RESISTOR	510Ω 1/16W J	
R2224	NRSA63J-511X	MG RESISTOR	510Ω 1/16W J	
R2225	NRSA63J-472X	MG RESISTOR	4.7kΩ 1/16W J	
R2226	NRSA63J-273X	MG RESISTOR	27kΩ 1/16W J	
R2227	NRSA63J-393X	MG RESISTOR	39kΩ 1/16W J	
R2228	NRSA63J-273X	MG RESISTOR	27kΩ 1/16W J	
R2229	NRSA63J-393X	MG RESISTOR	39kΩ 1/16W J	
R2230	NRSA63J-473X	MG RESISTOR	47kΩ 1/16W J	
R2231	NRSA63J-682X	MG RESISTOR	6.8kΩ 1/16W J	

MODEL	MARK	MODEL	MARK
DR-MV1BEK	A	DR-MV1SEK	D
DR-MV1BEU	B	DR-MV1SEU	E
DR-MV1SEF	C		

⚠ Symbol No.	Part No.	Part Name	Description	Local
R2232	NRSA63J-473X	MG RESISTOR	47kΩ 1/16W J	
R2233	NRSA63J-682X	MG RESISTOR	6.8kΩ 1/16W J	
R2234	NRSA63J-101X	MG RESISTOR	100Ω 1/16W J	
R2239	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
R2240	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
R2241	NRSA63J-473X	MG RESISTOR	47kΩ 1/16W J	
R2242	NRSA63J-682X	MG RESISTOR	6.8kΩ 1/16W J	
R2243	NRSA63J-473X	MG RESISTOR	47kΩ 1/16W J	
R2244	NRSA63J-682X	MG RESISTOR	6.8kΩ 1/16W J	
R2251	NRSA63J-472X	MG RESISTOR	4.7kΩ 1/16W J	
R2252	NRSA63J-221X	MG RESISTOR	220Ω 1/16W J	
R2253	NRSA63J-101X	MG RESISTOR	100Ω 1/16W J	
R2255	NRSA63J-273X	MG RESISTOR	27kΩ 1/16W J	
R2601	NRSA63J-101X	MG RESISTOR	100Ω 1/16W J	
R2602	NRSA63J-332X	MG RESISTOR	3.3kΩ 1/16W J	
R2603	NRSA63J-102X	MG RESISTOR	1kΩ 1/16W J	
R2604	NRSA63J-273X	MG RESISTOR	27kΩ 1/16W J	
R2605	NRSA63J-273X	MG RESISTOR	27kΩ 1/16W J	
R2606	NRSA63J-102X	MG RESISTOR	1kΩ 1/16W J	
R2607	NRSA63J-332X	MG RESISTOR	3.3kΩ 1/16W J	
R2608	NRSA63J-101X	MG RESISTOR	100Ω 1/16W J	
R2609	NRSA63J-102X	MG RESISTOR	1kΩ 1/16W J	
R2610	NRSA63J-101X	MG RESISTOR	100Ω 1/16W J	
R2611	NRSA63J-101X	MG RESISTOR	100Ω 1/16W J	
R2612	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J	
R2613	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J	
R2614	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J	
R2615	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J	
R2631	NRSA63J-102X	MG RESISTOR	1kΩ 1/16W J	
R2632	NRSA63J-101X	MG RESISTOR	100Ω 1/16W J	
R2633	NRSA63J-101X	MG RESISTOR	100Ω 1/16W J	
R2634	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J	
R2635	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J	
R2652	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
R2653	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J	
R2654	NRSA63J-153X	MG RESISTOR	15kΩ 1/16W J	
R2655	NRSA63J-473X	MG RESISTOR	47kΩ 1/16W J	
R2656	NRSA63J-473X	MG RESISTOR	47kΩ 1/16W J	
R2657	NRSA63J-473X	MG RESISTOR	47kΩ 1/16W J	
R2658	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J	
R2659	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J	
R2660	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J	
R2661	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J	
R3001	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
R3004	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
R3008	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
R3011	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
R3012	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
R3013	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
R3014	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
R3015	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
R3016	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
R3017	NRSA63J-104X	MG RESISTOR	100kΩ 1/16W J	
R3018	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
R3019	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
R3020	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
R3021	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
R3022	NRSA63J-682X	MG RESISTOR	6.8kΩ 1/16W J	
R3024	NRSA63J-102X	MG RESISTOR	1kΩ 1/16W J	
R3025	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
R3026	NRSA63J-102X	MG RESISTOR	1kΩ 1/16W J	
R3029	NRSA63J-102X	MG RESISTOR	1kΩ 1/16W J	
R3030	NRSA63J-102X	MG RESISTOR	1kΩ 1/16W J	
R3031	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
R3032	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
R3034	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
R3035	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
R3036	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
R3038	NRSA63J-102X	MG RESISTOR	1kΩ 1/16W J	
R3039	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
R3040	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
R3041	NRSA63J-102X	MG RESISTOR	1kΩ 1/16W J	
R3042	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
R3044	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
R3046	NRSA63J-102X	MG RESISTOR	1kΩ 1/16W J	
R3047	NRSA63J-102X	MG RESISTOR	1kΩ 1/16W J	
R3048	NRSA63J-102X	MG RESISTOR	1kΩ 1/16W J	
R3049	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
R3050	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
R3051	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
R3052	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
R3053	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
R3054	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
R3055	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
R3059	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
R3060	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
R3061	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
R3062	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J	
R3063	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
R3066	NRSA63J-472X	MG RESISTOR	4.7kΩ 1/16W J	
R3069	NRSA63J-101X	MG RESISTOR	100Ω 1/16W J	
R3071	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J	
R3072	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
R3073	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
R3074	NRSA63J-102X	MG RESISTOR	1kΩ 1/16W J	C
R3075	NRSA63J-471X	MG RESISTOR	470Ω 1/16W J	
R3076	NRSA63J-471X	MG RESISTOR	470Ω 1/16W J	
R3077	NRSA63J-102X	MG RESISTOR	1kΩ 1/16W J	
R3078	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
R3079	NRSA63J-102X	MG RESISTOR	1kΩ 1/16W J	
R3080	NRSA63J-102X	MG RESISTOR	1kΩ 1/16W J	
R3081	NRSA63J-102X	MG RESISTOR	1kΩ 1/16W J	
R3083	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
R3086	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
R3087	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
R3088	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
R3089	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
R3090	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
R3091	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
R3092	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
R3093	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
R3094	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
R3095	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
R3096	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
R3098	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
R3107	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
R3108	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
R3213	NRSA63J-474X	MG RESISTOR	470kΩ 1/16W J	
R3214	NRSA63J-334X	MG RESISTOR	330kΩ 1/16W J	
R3218	NRSA63J-472X	MG RESISTOR	4.7kΩ 1/16W J	
R3219	NRSA63J-472X	MG RESISTOR	4.7kΩ 1/16W J	
R3220	QRE141J-104Y	C RESISTOR	100kΩ 1/4W J	
R3223	NRSA63J-472X	MG RESISTOR	4.7kΩ 1/16W J	
R3224	NRSA63J-472X	MG RESISTOR	4.7kΩ 1/16W J	
R3229	NRSA63J-105X	MG RESISTOR	1MΩ 1/16W J	
R3230	NRSA63J-472X	MG RESISTOR	4.7kΩ 1/16W J	
R3231	NRSA63J-102X	MG RESISTOR	1kΩ 1/16W J	
R3233	NRSA63J-472X	MG RESISTOR	4.7kΩ 1/16W J	
R3234	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J	
R3235	NRSA63J-332X	MG RESISTOR	3.3kΩ 1/16W J	
R3236	NRSA63J-332X	MG RESISTOR	3.3kΩ 1/16W J	
R3239	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J	
R3240	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J	
R3242	NRSA63J-472X	MG RESISTOR	4.7kΩ 1/16W J	
R3245	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	A,B,D,E
R3251	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J	
R3256	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J	
R3257	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J	
R3258	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J	
R3311	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
R3312	NRSA63J-102X	MG RESISTOR	1kΩ 1/16W J	C
R3313	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
R3314	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
R3315	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
R3317	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
R3318	NRSA63J-104X	MG RESISTOR	100kΩ 1/16W J	
R3322	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
R3325	NRSA63J-472X	MG RESISTOR	4.7kΩ 1/16W J	
R3326	NRSA63J-472X	MG RESISTOR	4.7kΩ 1/16W J	
R3327	NRSA63J-472X	MG RESISTOR	4.7kΩ 1/16W J	
R3330	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
R3334	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
R3335	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
R3336	NRSA63J-472X	MG RESISTOR	4.7kΩ 1/16W J	
R3337	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
R3338	NRSA63J-182X	MG RESISTOR	1.8kΩ 1/16W J	

MODEL	MARK	MODEL	MARK
DR-MV1BEK	A	DR-MV1SEK	D
DR-MV1BEU	B	DR-MV1SEU	E
DR-MV1SEF	C		

⚠ Symbol No.	Part No.	Part Name	Description	Local
R3340	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
R3346	NRSA63J-102X	MG RESISTOR	1kΩ 1/16W J	
R3347	NRSA63J-102X	MG RESISTOR	1kΩ 1/16W J	
R3348	NRSA63J-102X	MG RESISTOR	1kΩ 1/16W J	
R3349	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
R3350	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
R3351	NRSA63J-471X	MG RESISTOR	470Ω 1/16W J	
R3352	NRSA63J-471X	MG RESISTOR	470Ω 1/16W J	
R3353	NRSA63J-471X	MG RESISTOR	470Ω 1/16W J	
R3354	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
R3355	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
R3356	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
R3357	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J	
R3359	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
R3362	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J	
R3363	NRSA63J-472X	MG RESISTOR	4.7kΩ 1/16W J	
R3366	NRSA63J-472X	MG RESISTOR	4.7kΩ 1/16W J	
R3369	NRSA63J-101X	MG RESISTOR	100Ω 1/16W J	
R3371	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J	
R3372	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
R3373	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
R3374	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
R3375	NRSA63J-471X	MG RESISTOR	470Ω 1/16W J	
R3376	NRSA63J-471X	MG RESISTOR	470Ω 1/16W J	
R3377	NRSA63J-471X	MG RESISTOR	470Ω 1/16W J	C
R3379	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
R3380	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
R3381	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
R3385	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
R3386	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
R3388	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
R3390	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
R3403	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
R3405	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
R3407	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	C
R3505	QRE141J-181Y	C RESISTOR	180Ω 1/4W J	
R3506	NRSA63J-183X	MG RESISTOR	18kΩ 1/16W J	
R3507	NRSA63J-183X	MG RESISTOR	18kΩ 1/16W J	
R3508	NRSA63J-121X	MG RESISTOR	120Ω 1/16W J	
R3509	NRSA63J-183X	MG RESISTOR	18kΩ 1/16W J	
R3510	NRSA63J-121X	MG RESISTOR	120Ω 1/16W J	
R3511	NRSA63J-183X	MG RESISTOR	18kΩ 1/16W J	
R3513	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
R3514	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J	
R3515	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J	
R3516	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J	
R3517	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J	
R3518	NRSA63J-472X	MG RESISTOR	4.7kΩ 1/16W J	
R3519	NRSA63J-472X	MG RESISTOR	4.7kΩ 1/16W J	
R3520	NRSA63J-104X	MG RESISTOR	100kΩ 1/16W J	
R3522	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J	
R3523	NRSA63J-472X	MG RESISTOR	4.7kΩ 1/16W J	
R3524	NRSA63J-472X	MG RESISTOR	4.7kΩ 1/16W J	
R3529	NRSA63J-105X	MG RESISTOR	1MΩ 1/16W J	
R3530	NRSA63J-472X	MG RESISTOR	4.7kΩ 1/16W J	
R3531	NRSA63J-102X	MG RESISTOR	1kΩ 1/16W J	
R3535	NRSA63J-332X	MG RESISTOR	3.3kΩ 1/16W J	
R3536	NRSA63J-332X	MG RESISTOR	3.3kΩ 1/16W J	
R3541	NRSA63J-104X	MG RESISTOR	100kΩ 1/16W J	
R3553	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J	
R3564	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J	
R4003	NRSA63J-561X	MG RESISTOR	560Ω 1/16W J	
R4004	NRSA63J-561X	MG RESISTOR	560Ω 1/16W J	
R4005	NRSA63J-562X	MG RESISTOR	5.6kΩ 1/16W J	
R4007	NRSA63J-102X	MG RESISTOR	1kΩ 1/16W J	
R4008	NRSA63J-102X	MG RESISTOR	1kΩ 1/16W J	
R4009	NRSA63J-102X	MG RESISTOR	1kΩ 1/16W J	
R4010	NRSA63J-222X	MG RESISTOR	2.2kΩ 1/16W J	
R4012	NRSA63J-222X	MG RESISTOR	2.2kΩ 1/16W J	
R4013	NRSA63J-102X	MG RESISTOR	1kΩ 1/16W J	
R4015	NRSA63J-562X	MG RESISTOR	5.6kΩ 1/16W J	
R4017	NRSA63J-102X	MG RESISTOR	1kΩ 1/16W J	
R7101	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J	
R7102	NRSA63J-822X	MG RESISTOR	8.2kΩ 1/16W J	
R7201	NRSA63J-101X	MG RESISTOR	100Ω 1/16W J	
R7202	NRSA63J-221X	MG RESISTOR	220Ω 1/16W J	
R7203	NRSA63J-472X	MG RESISTOR	4.7kΩ 1/16W J	
R7204	QRE121J-100Y	C RESISTOR	10Ω 1/2W J	
R7501	NRSA63J-4R7X	MG RESISTOR	4.7Ω 1/16W J	
R7502	NRSA63J-4R7X	MG RESISTOR	4.7Ω 1/16W J	
R7503	NRSA63J-4R7X	MG RESISTOR	4.7Ω 1/16W J	
R7504	NRSA63J-820X	MG RESISTOR	82Ω 1/16W J	
R7505	NRSA63J-100X	MG RESISTOR	10Ω 1/16W J	
R7506	NRSA63J-100X	MG RESISTOR	10Ω 1/16W J	
R7507	NRSA63J-104X	MG RESISTOR	100kΩ 1/16W J	
L2	QQL071J-221Y	COIL	20.0Ω 220uH J	C
L3	QQL29BJ-100Z	P COIL	0.40Ω 10uH J	
L5	QQL29BJ-100Z	P COIL	0.40Ω 10uH J	
L6	QQL29BJ-100Z	P COIL	0.40Ω 10uH J	
L7	QQR0967-001	CHOKE COIL		
L10	QQL29BJ-100Z	P COIL	0.40Ω 10uH J	
L14	QQL071J-101Y	COIL	10.80Ω 100uH J	C
L201	QQL29BK-1R0Z	P COIL	0.14Ω 1uH K	
L203	QQL37CJ-220Z	COIL	1.30Ω 22uH J	
L204	QQL29BJ-100Z	P COIL	0.40Ω 10uH J	
L206	QQL071J-220Y	COIL	2.20Ω 22uH J	
L2251	QQL29BJ-100Z	P COIL	0.40Ω 10uH J	
L2252	QQL29BJ-151Z	P COIL	4.80Ω 150uH J	
L3001	QQL231J-R22Y	COIL	0.40Ω 0.22uH J	
L7101	QQL29BJ-100Z	P COIL	0.40Ω 10uH J	
L7201	QQL29BJ-100Z	P COIL	0.40Ω 10uH J	
L7501	QQL29BK-1R0Z	P COIL	0.14Ω 1uH K	
L7502	QQL29BK-1R0Z	P COIL	0.14Ω 1uH K	
T2051	PELN0832	OSC TRANS		
B1	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
B2	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
B4	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	A,B,D,E
B7	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
B8	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	C
B9	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	C
B203	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
B3461	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
B3462	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
B3466	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
B3502	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
B3504	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
B3961	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
B3962	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
B3966	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
CN1	QGF1201C2-09	CONNECTOR	FFC/FPC (1-9)	
CN2001	QGF1207C1-06	CONNECTOR	FFC/FPC (1-6)	
CN2002	QGB2532J1-02	CONNECTOR	B-B (1-2)	
CN2601	QGB1231L1-11	CONNECTOR	B-B (1-11)	
CN3001	QGB2032M4-12	CONNECTOR	B-B (1-12)	
CN3102	QGF1207C1-11	CONNECTOR	FFC/FPC (1-11)	
CN3103	QGB1231L1-15	CONNECTOR	B-B (1-15)	
CN3401	QGF1207C1-06	CONNECTOR	FFC/FPC (1-6)	
CN3901	QGF1207C1-06	CONNECTOR	FFC/FPC (1-6)	
CN5311	QGB1231M1-15	CONNECTOR	B-B (1-15)	
CN7111	QGF1207C1-09	CONNECTOR	FFC/FPC (1-9)	
CN7112	QGF1207C1-13	CONNECTOR	FFC/FPC (1-13)	
CN7113	QGB2024K1-14S	CONNECTOR	B-B (1-14)	
CN7114	QGB2024K1-14S	CONNECTOR	B-B (1-14)	
CN7115	QGB2024K1-17S	CONNECTOR	B-B (1-17)	
CN7116	QGF1207C1-14	CONNECTOR	FFC/FPC (1-14)	
CN7117	QGF1207C1-13	CONNECTOR	FFC/FPC (1-13)	
CN7118	QGF1207C1-07	CONNECTOR	FFC/FPC (1-7)	
CN7119	QGF1207C1-15	CONNECTOR	FFC/FPC (1-15)	C
⚠ CP3002	QMFZ050-1R25X-E	FUSE	1.25A 125V	
⚠ CP4002	QMFZ050-1R25X-E	FUSE	1.25A 125V	
J7009	QNN0096-001	PIN JACK	OAXIAL OUT	
J7010	GP1FA313TZ	OPT TRANSMITTER	OPTICAL OUT	
J7201	QNS0100-001	3.5 JACK	SAT CONTROL	
JS3001	NSW0238-001	ROTARY ENCODER		
K2001	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
K2002	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
K2003	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
K2004	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
K2251	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
K2252	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
K3001	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
K3002	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
K3003	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
K3004	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	

MODEL	MARK	MODEL	MARK
DR-MV1BEK	A	DR-MV1SEK	D
DR-MV1BEU	B	DR-MV1SEU	E
DR-MV1SEF	C		

⚠ Symbol No.	Part No.	Part Name	Description	Local
K3005	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
K3006	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
K3007	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
K3008	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
K3009	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
K3010	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
K3011	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
K7501	NQR0147-004X	FERRITE BEADS		
K7502	NQR0147-004X	FERRITE BEADS		
K7503	NQR0147-004X	FERRITE BEADS		
OT1	LP31378-001A	BOSS(MECHA)3		
OT2	LP31379-001A	BOSS(MECHA)4 (x2)		
S3001	QSW0602-004	PUSH SWITCH	REC.SAFETY	
SD1	LP31179-001A	SHILD PLATE(PRE/REC)		
W1	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
W2	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
W3	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
W4	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
W5	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
W6	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
W7	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
W8	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
W10	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
W11	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
W12	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
W13	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
W14	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
W15	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
W16	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
W17	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
W18	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
W19	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
W20	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
W21	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
W22	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
W23	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
W24	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
W25	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
W26	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
W27	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
W29	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
W30	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
W31	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
W32	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
W33	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
W34	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
W35	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
W36	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
W37	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
W40	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
W41	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
W42	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
W43	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
W45	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
W46	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
WR2	QUB321-06ZAZA	SIN TWIST WIRE		
WR3	QUB321-04ZAZA	SIN TWIST WIRE		
X1	QAX0740-001	CRYSTAL	4.433619MHz	
X3001	QAX0445-001	CRYSTAL	32.768kHz	
X3002	QAX0527-001	CRYSTAL	10.000000MHz	
X3301	QAX0444-001	CRYSTAL	32.768kHz	
X3302	QAX0527-001	CRYSTAL	10.000000MHz	

Terminal board

Block No. [0][6]

⚠ Symbol No.	Part No.	Part Name	Description	Local
PW1	LPA10233-01D3	TERMINAL BOARD ASSY		A,B,D,E
PW1	LPA10233-02C3	TERMINAL BOARD ASSY		C
IC901	HA118226F	IC		
IC902	BA7623F-X	SOP IC		

⚠ Symbol No.	Part No.	Part Name	Description	Local
Q901	2SC2412K/QRS/-X	TRANSISTOR		
Q902	2SC2412K/QRS/-X	TRANSISTOR		
Q903	DTC144WKA-X	DIGI TRANSISTOR		
Q904	DTC144WKA-X	DIGI TRANSISTOR		
Q907	2SA1037AK/QR/-X	TRANSISTOR		
Q908	2SA1037AK/QR/-X	TRANSISTOR		
Q912	2SA1037AK/QR/-X	TRANSISTOR		
Q913	2SA1037AK/QR/-X	TRANSISTOR		
Q917	2SC2412K/QRS/-X	TRANSISTOR		
Q917 or	2SD601A/QRS/-X	TRANSISTOR		
Q917 or	2SC3928A/QRS/-X	TRANSISTOR		
Q918	2SC2412K/QRS/-X	TRANSISTOR		
Q918 or	2SD601A/QRS/-X	TRANSISTOR		
Q918 or	2SC3928A/QRS/-X	TRANSISTOR		
Q919	DTA144WKA-X	TRANSISTOR		
Q919 or	UN211E-X	DIGI TRANSISTOR		
Q919 or	RT1P44HC-X	DIGI TRANSISTOR		
Q932	2SA1576A/QR/-X	TRANSISTOR		
Q932 or	2PA1576/R/-X	TRANSISTOR		
Q932 or	2SB1218A/QR/-X	TRANSISTOR		
Q933	2SA1576A/QR/-X	TRANSISTOR		
Q933 or	2PA1576/R/-X	TRANSISTOR		
Q933 or	2SB1218A/QR/-X	TRANSISTOR		
Q936	2SA1576A/QR/-X	TRANSISTOR		
Q936 or	2PA1576/R/-X	TRANSISTOR		
Q936 or	2SB1218A/QR/-X	TRANSISTOR		
Q941	2SA1037AK/QR/-X	TRANSISTOR		
Q942	DTC114TKA-X	TRANSISTOR		
Q943	DTC144WKA-X	DIGI TRANSISTOR		
Q944	DTC114EKA-X	TRANSISTOR		
D902	QRE141J-181Y	C RESISTOR	180Ω 1/4W J	
D904	MTZJ9.1B-T2	Z DIODE		
D904 or	RD9.1ES/B2/-T2	Z DIODE		
D905	1SS133-T2	DIODE		
D905 or	1SS270A-T2	SI DIODE		
C901	QEKJ0JM-227Z	E CAPACITOR	220uF 6.3V M	
C902	NDC31HJ-331X	C CAPACITOR	330pF 50V J	
C903	NDC31HJ-331X	C CAPACITOR	330pF 50V J	
C904	NDC31HJ-331X	C CAPACITOR	330pF 50V J	
C905	NDC31HJ-331X	C CAPACITOR	330pF 50V J	
C906	NCB31HK-471X	C CAPACITOR	470pF 50V K	
C907	NCB31HK-471X	C CAPACITOR	470pF 50V K	
C908	NCB31HK-471X	C CAPACITOR	470pF 50V K	
C909	NCB31HK-471X	C CAPACITOR	470pF 50V K	
C914	QEKJ0JM-227Z	E CAPACITOR	220uF 6.3V M	
C915	QEKJ0JM-337Z	E CAPACITOR	330uF 6.3V M	
C916	QEKJ0JM-337Z	E CAPACITOR	330uF 6.3V M	
C917	QEKJ0JM-337Z	E CAPACITOR	330uF 6.3V M	
C918	NDC31HJ-331X	C CAPACITOR	330pF 50V J	
C919	NDC31HJ-331X	C CAPACITOR	330pF 50V J	
C920	NDC31HJ-331X	C CAPACITOR	330pF 50V J	
C921	NDC31HJ-331X	C CAPACITOR	330pF 50V J	
C922	NCB31HK-471X	C CAPACITOR	470pF 50V K	
C923	NCB31HK-471X	C CAPACITOR	470pF 50V K	
C924	NCB31HK-471X	C CAPACITOR	470pF 50V K	
C925	NCB31HK-471X	C CAPACITOR	470pF 50V K	
C930	NCB31HK-103X	C CAPACITOR	0.01uF 50V K	
C932	NCF31EZ-104X	C CAPACITOR	0.1uF 25V Z	
C934	NCB31HK-103X	C CAPACITOR	0.01uF 50V K	
C935	NCB31HK-103X	C CAPACITOR	0.01uF 50V K	
C937	QEKJ1EM-106Z	E CAPACITOR	10uF 25V M	
C939	NCF31AZ-105X	C CAPACITOR	1uF 10V Z	
C940	NCF31AZ-105X	C CAPACITOR	1uF 10V Z	
C941	NCF31AZ-105X	C CAPACITOR	1uF 10V Z	
C942	QEKJ1HM-475Z	E CAPACITOR	4.7uF 50V M	
C943	QEKJ1EM-106Z	E CAPACITOR	10uF 25V M	
C944	QEKJ1CM-476Z	E CAPACITOR	47uF 16V M	
C945	QEKJ1EM-106Z	E CAPACITOR	10uF 25V M	
C946	QEKJ1EM-106Z	E CAPACITOR	10uF 25V M	
C947	QEKJ1EM-106Z	E CAPACITOR	10uF 25V M	
C948	QEKJ1EM-106Z	E CAPACITOR	10uF 25V M	
C949	QEKJ1EM-106Z	E CAPACITOR	10uF 25V M	
C950	QEKJ1EM-106Z	E CAPACITOR	10uF 25V M	
C951	QEKJ1EM-106Z	E CAPACITOR	10uF 25V M	
C952	QEKJ1EM-106Z	E CAPACITOR	10uF 25V M	
C953	NCF31AZ-105X	C CAPACITOR	1uF 10V Z	

MODEL	MARK	MODEL	MARK
DR-MV1BEK	A	DR-MV1SEK	D
DR-MV1BEU	B	DR-MV1SEU	E
DR-MV1SEF	C		

⚠ Symbol No.	Part No.	Part Name	Description	Local
C954	NCF31AZ-105X	C CAPACITOR	1uF 10V Z	
C955	NCF31AZ-105X	C CAPACITOR	1uF 10V Z	
C956	QEKJ0JM-476Z	E CAPACITOR	47uF 6.3V M	
C957	NDC31HJ-101X	C CAPACITOR	100pF 50V J	
C960	NCB31HK-103X	C CAPACITOR	0.01uF 50V K	
C961	QEKJ0JM-476Z	E CAPACITOR	47uF 6.3V M	
C962	NCB31HK-103X	C CAPACITOR	0.01uF 50V K	
C963	QEKJ1CM-476Z	E CAPACITOR	47uF 16V M	
C964	NCB31HK-103X	C CAPACITOR	0.01uF 50V K	
C965	NCB31HK-103X	C CAPACITOR	0.01uF 50V K	
C968	NCF31AZ-105X	C CAPACITOR	1uF 10V Z	
C971	QEKJ1CM-476Z	E CAPACITOR	47uF 16V M	
C973	NCB31HK-103X	C CAPACITOR	0.01uF 50V K	
C981	QEKJ0JM-227Z	E CAPACITOR	220uF 6.3V M	
C982	QEKJ0JM-337Z	E CAPACITOR	330uF 6.3V M	
C983	QEKJ0JM-337Z	E CAPACITOR	330uF 6.3V M	
C986	NCB31HK-102X	C CAPACITOR	1000pF 50V K	
C988	NCB31HK-102X	C CAPACITOR	1000pF 50V K	
C991	QEKJ0JM-227Z	E CAPACITOR	220uF 6.3V M	
C992	QEKJ0JM-227Z	E CAPACITOR	220uF 6.3V M	
C994	QEKJ0JM-227Z	E CAPACITOR	220uF 6.3V M	
C996	NCB31HK-103X	C CAPACITOR	0.01uF 50V K	
C997	NCB31HK-103X	C CAPACITOR	0.01uF 50V K	
R901	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J	
R902	NRSA63J-223X	MG RESISTOR	22kΩ 1/16W J	
R903	NRSA63J-183X	MG RESISTOR	18kΩ 1/16W J	
R904	NRSA63J-474X	MG RESISTOR	470kΩ 1/16W J	
R909	NRSA63J-750X	MG RESISTOR	75Ω 1/16W J	
R910	NRSA63J-750X	MG RESISTOR	75Ω 1/16W J	
R911	NRSA63J-750X	MG RESISTOR	75Ω 1/16W J	
R912	NRSA63J-750X	MG RESISTOR	75Ω 1/16W J	
R913	NRSA63J-750X	MG RESISTOR	75Ω 1/16W J	
R914	NRSA63J-101X	MG RESISTOR	100Ω 1/16W J	
R915	NRSA63J-101X	MG RESISTOR	100Ω 1/16W J	
R918	NRSA63J-102X	MG RESISTOR	1kΩ 1/16W J	
R919	QRE141J-131Y	C RESISTOR	130Ω 1/4W J	
R920	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
R921	NRSA63J-102X	MG RESISTOR	1kΩ 1/16W J	
R922	NRSA63J-750X	MG RESISTOR	75Ω 1/16W J	
R923	NRSA63J-750X	MG RESISTOR	75Ω 1/16W J	
R924	NRSA63D-680X	MG RESISTOR	68Ω 1/16W D	
R925	NRSA63D-750X	MG RESISTOR	75Ω 1/16W D	
R926	NRSA63D-750X	MG RESISTOR	75Ω 1/16W D	
R927	NRSA63J-101X	MG RESISTOR	100Ω 1/16W J	
R928	NRSA63J-101X	MG RESISTOR	100Ω 1/16W J	
R937	QRE141J-101Y	C RESISTOR	100Ω 1/4W J	
R939	QRE141J-101Y	C RESISTOR	100Ω 1/4W J	
R940	NRSA63J-101X	MG RESISTOR	100Ω 1/16W J	
R943	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
R944	QRE121J-331Y	C RESISTOR	330Ω 1/2W J	
R945	QRE121J-331Y	C RESISTOR	330Ω 1/2W J	
R949	NRSA63J-473X	MG RESISTOR	47kΩ 1/16W J	
R950	NRSA63J-473X	MG RESISTOR	47kΩ 1/16W J	
R951	NRSA63J-472X	MG RESISTOR	4.7kΩ 1/16W J	
R952	NRSA63J-472X	MG RESISTOR	4.7kΩ 1/16W J	
R953	QRE141J-102Y	C RESISTOR	1kΩ 1/4W J	
R954	NRSA63J-273X	MG RESISTOR	27kΩ 1/16W J	
R960	NRSA63J-471X	MG RESISTOR	470Ω 1/16W J	
R961	NRSA63J-471X	MG RESISTOR	470Ω 1/16W J	
R965	QRE121J-331Y	C RESISTOR	330Ω 1/2W J	
R966	NRSA63J-562X	MG RESISTOR	5.6kΩ 1/16W J	
R967	NRSA63J-562X	MG RESISTOR	5.6kΩ 1/16W J	
R968	NRSA63J-332X	MG RESISTOR	3.3kΩ 1/16W J	
R969	QRE141J-101Y	C RESISTOR	100Ω 1/4W J	
R976	QRE141J-102Y	C RESISTOR	1kΩ 1/4W J	
R977	QRE141J-473Y	C RESISTOR	47kΩ 1/4W J	
R978	NRSA63J-393X	MG RESISTOR	39kΩ 1/16W J	
R985	NRSA63D-750X	MG RESISTOR	75Ω 1/16W D	
R986	NRSA63D-750X	MG RESISTOR	75Ω 1/16W D	
R987	NRSA63D-750X	MG RESISTOR	75Ω 1/16W D	
R988	NRSA63J-101X	MG RESISTOR	100Ω 1/16W J	
R989	NRSA63J-101X	MG RESISTOR	100Ω 1/16W J	
R990	NRSA63J-273X	MG RESISTOR	27kΩ 1/16W J	
R991	NRSA63J-473X	MG RESISTOR	47kΩ 1/16W J	
R992	NRSA63J-102X	MG RESISTOR	1kΩ 1/16W J	
R993	NRSA63J-393X	MG RESISTOR	39kΩ 1/16W J	
R994	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J	
R999	QRE141J-103Y	C RESISTOR	10kΩ 1/4W J	
L901	QQL071J-100Y	COIL	1.40Ω 10uH J	
L902	QQL071J-100Y	COIL	1.40Ω 10uH J	
L903	QQL071J-1R0Y	COIL	0.46Ω 1uH J	
L904	QQL071J-4R7Y	COIL	1.00Ω 4.7uH J	
L905	QQL071J-4R7Y	COIL	1.00Ω 4.7uH J	
L906	QQL071J-100Y	COIL	1.40Ω 10uH J	
L907	QQL071J-100Y	COIL	1.40Ω 10uH J	
L908	QQL231J-R22Y	COIL	0.40Ω 0.22uH J	
L909	QQL071J-4R7Y	COIL	1.00Ω 4.7uH J	
L910	QQL071J-4R7Y	COIL	1.00Ω 4.7uH J	
L914	QQL071J-1R0Y	COIL	0.46Ω 1uH J	
L917	QQL29BJ-100Z	P COIL	0.40Ω 10uH J	
L918	QQL29BJ-100Z	P COIL	0.40Ω 10uH J	
L919	QQL29BJ-100Z	P COIL	0.40Ω 10uH J	
L931	QQL071J-100Y	COIL	1.40Ω 10uH J	
L932	QQL071J-100Y	COIL	1.40Ω 10uH J	
L933	QQL071J-100Y	COIL	1.40Ω 10uH J	
L934	QQL071J-100Y	COIL	1.40Ω 10uH J	
CN913	QGB2024J1-14S	CONNECTOR	B-B (1-14)	
CN914	QGB2024J1-14S	CONNECTOR	B-B (1-14)	
CN915	QGB2024J1-17S	CONNECTOR	B-B (1-17)	
ET1	QNZ0431-001Z	EARTH TERMINAL		
J901	QNZ0627-001	21P CONNECTOR	L-1 IN/OUT	
J902	QNZ0627-001	21P CONNECTOR	L-2 IN/OUT	
J905	QNN0599-002	PIN JACK	COMPONENT VIDEO OUT	
J907	QNN0295-002	PIN JACK	AUDIO OUT	
W101	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
W102	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
W103	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
W104	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
W105	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
W106	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
W107	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
WR95	QUB321-07ZAZA	SIN TWIST WIRE		A,C,D,E
WR96	QUB321-07ZAZA	SIN TWIST WIRE		A,C,D,E

A/C head board

Block No. [1][2]

⚠ Symbol No.	Part No.	Part Name	Description	Local
PW1	LPA10158-01A1	A/C HEAD BOARD ASSY		

MODEL	MARK	MODEL	MARK
DR-MV1BEK	A	DR-MV1SEK	D
DR-MV1BEU	B	DR-MV1SEU	E
DR-MV1SEF	C		

Demod board

Block No. [1][4]

⚠ Symbol No.	Part No.	Part Name	Description	Local
PW1	LPA10094-16A	DEMOD BOARD ASSY		C
PW1	LPA10094-15A	DEMOD BOARD ASSY		A,B,D,E
IC6701	MSP3417G-X	IC		
IC6701 or	MSP3417GQGB8V3X	IC		
Q6701	2SC3936/BC/-X	TRANSISTOR		
D6701	1SS133-T2	DIODE		
D6701 or	1SS270A-T2	SI DIODE		
C6701	NCB21HK-103X	C CAPACITOR	0.01uF 50V K	
C6704	NCB21HK-103X	C CAPACITOR	0.01uF 50V K	
C6707	NDC21HJ-470X	C CAPACITOR	47pF 50V J	
C6708	NDC21HJ-100X	C CAPACITOR	10pF 50V J	C
C6708	NDC21HJ-8R0X	C CAPACITOR	8pF 50V J	A,B,D,E
C6709	NDC21HJ-100X	C CAPACITOR	10pF 50V J	C
C6709	NDC21HJ-8R0X	C CAPACITOR	8pF 50V J	A,B,D,E
C6713	NCF21CZ-224X	C CAPACITOR	0.22uF 16V Z	
C6714	NCB21HK-222X	C CAPACITOR	2200pF 50V K	
C6715	QEKJ1HM-225Z	E CAPACITOR	2.2uF 50V M	
C6716	NCB21HK-222X	C CAPACITOR	2200pF 50V K	
C6717	QEKJ1HM-225Z	E CAPACITOR	2.2uF 50V M	
C6719	QEKJ1EM-106Z	E CAPACITOR	10uF 25V M	
C6720	QEKJ1EM-106Z	E CAPACITOR	10uF 25V M	
C6721	NCB21HK-103X	C CAPACITOR	0.01uF 50V K	
C6723	NCB21HK-103X	C CAPACITOR	0.01uF 50V K	
C6724	QEKJ1HM-225Z	E CAPACITOR	2.2uF 50V M	C
R6701	NRSA02J-392X	MG RESISTOR	3.9kΩ 1/10W J	
R6702	NRSA02J-682X	MG RESISTOR	6.8kΩ 1/10W J	
R6703	NRSA02J-0R0X	MG RESISTOR	0Ω 1/10W J	
R6704	NRSA02J-102X	MG RESISTOR	1kΩ 1/10W J	
R6705	NRSA02J-271X	MG RESISTOR	270Ω 1/10W J	
R6707	NRSA02J-330X	MG RESISTOR	33Ω 1/10W J	
R6708	NQR0200-003X	FERRITE BEADS		C
R6708	NRSA02J-103X	MG RESISTOR	10kΩ 1/10W J	A,B,D,E
R6709	NQR0200-003X	FERRITE BEADS		C
R6709	NRSA02J-102X	MG RESISTOR	1kΩ 1/10W J	A,B,D,E
R6710	NRSA02J-120X	MG RESISTOR	12Ω 1/10W J	C
R6710	NRSA02J-0R0X	MG RESISTOR	0Ω 1/10W J	A,B,D,E
R6711	NRSA02J-104X	MG RESISTOR	100kΩ 1/10W J	
R6712	NRSA02J-102X	MG RESISTOR	1kΩ 1/10W J	
R6713	NRSA02J-123X	MG RESISTOR	12kΩ 1/10W J	
R6714	NRSA02J-102X	MG RESISTOR	1kΩ 1/10W J	
R6715	NRSA02J-123X	MG RESISTOR	12kΩ 1/10W J	
R6716	NRSA02J-470X	MG RESISTOR	47Ω 1/10W J	
R6719	QRE141J-103Y	C RESISTOR	10kΩ 1/4W J	
R6720	NRSA02J-562X	MG RESISTOR	5.6kΩ 1/10W J	
R6721	NRSA02J-562X	MG RESISTOR	5.6kΩ 1/10W J	
BK1	LP40425-001A	BRACKET(BOARD ASSY)		
CN6701	QGG2502K1-10	CONNECTOR	(1-10)	
K6701	NQR0200-003X	FERRITE BEADS		
K6702	NQR0200-003X	FERRITE BEADS		
K6703	NRSA02J-102X	MG RESISTOR	1kΩ 1/10W J	C
K6703	NQR0200-003X	FERRITE BEADS		A,B,D,E
K6704	NRSA02J-102X	MG RESISTOR	1kΩ 1/10W J	C
K6704	NQR0200-003X	FERRITE BEADS		A,B,D,E
K6705	NQR0200-003X	FERRITE BEADS		
K6706	NQR0200-003X	FERRITE BEADS		
K6707	NQR0200-003X	FERRITE BEADS		C
W6701	NRSA02J-0R0X	MG RESISTOR	0Ω 1/10W J	
X6701	QAX0773-001Z	CRYSTAL	18.432000MHz	

Tuner board

Block No. [2][4]

⚠ Symbol No.	Part No.	Part Name	Description	Local
PW1	LPA10233-01D1	TUNER BOARD ASSY		A,B,D,E
PW1	LPA10233-02C1	TUNER BOARD ASSY		C
Q6001	2SD2144S/UV/-T	TRANSISTOR		
Q6030	2SA1037AK/QR/-X	TRANSISTOR		
Q6031	DTC114EKA-X	TRANSISTOR		
Q6130	2SA1037AK/QR/-X	TRANSISTOR		
Q6131	DTC114EKA-X	TRANSISTOR		
D6002	HZ30-2L-T2	Z DIODE		
D6002 or	HZ30-2LTD	Z DIODE		
C6001	QEKJ0JM-107Z	E CAPACITOR	100uF 6.3V M	
C6002	NCB31HK-103X	C CAPACITOR	0.01uF 50V K	
C6037	QEKJ1CM-106Z	E CAPACITOR	10uF 16V M	C
C6114	NCB31HK-103X	C CAPACITOR	0.01uF 50V K	A,B,D,E
C6137	QEKJ1CM-106Z	E CAPACITOR	10uF 16V M	
C6501	QEKJ0JM-337Z	E CAPACITOR	330uF 6.3V M	
C6502	NCB31HK-103X	C CAPACITOR	0.01uF 50V K	
C6503	NCB31HK-103X	C CAPACITOR	0.01uF 50V K	
C6603	NCB31HK-103X	C CAPACITOR	0.01uF 50V K	
R6001	NRSA63J-470X	MG RESISTOR	47Ω 1/16W J	
R6002	NRSA63J-101X	MG RESISTOR	100Ω 1/16W J	
R6020	NRSA63J-102X	MG RESISTOR	1kΩ 1/16W J	
R6021	NRSA63J-102X	MG RESISTOR	1kΩ 1/16W J	
R6030	QRE141J-102Y	C RESISTOR	1kΩ 1/4W J	
R6031	NRSA63J-101X	MG RESISTOR	100Ω 1/16W J	
R6032	NRSA63J-183X	MG RESISTOR	18kΩ 1/16W J	C
R6033	NRSA63J-183X	MG RESISTOR	18kΩ 1/16W J	C
R6080	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J	
R6120	NRSA63J-102X	MG RESISTOR	1kΩ 1/16W J	
R6121	NRSA63J-102X	MG RESISTOR	1kΩ 1/16W J	
R6130	QRE141J-332Y	C RESISTOR	3.3kΩ 1/4W J	
R6131	NRSA63J-101X	MG RESISTOR	100Ω 1/16W J	
R6132	NRSA63J-183X	MG RESISTOR	18kΩ 1/16W J	C
R6132	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	A,B,D,E
R6133	NRSA63J-183X	MG RESISTOR	18kΩ 1/16W J	C
L6001	QQL29BK-1R0Z	P COIL	0.14Ω 1uH K	
L6002	QQL29BK-1R0Z	P COIL	0.14Ω 1uH K	
L6005	QQL29BK-1R0Z	P COIL	0.14Ω 1uH K	
L6101	QQL29BK-1R0Z	P COIL	0.14Ω 1uH K	
L6102	QQL29BK-1R0Z	P COIL	0.14Ω 1uH K	
L6501	QQL29BJ-3R3Z	P COIL	0.24Ω 3.3uH J	
L6601	QQL29BJ-3R3Z	P COIL	0.24Ω 3.3uH J	
BK1	LP21286-001A	BRACKET(TUNER)		
CD1	QAM0641-001	RF CABLE		
CD2	QAM0641-001	RF CABLE		
CD3	QAM0641-001	RF CABLE		
CN6001	QGF1207F1-14	CONNECTOR	FFC/FPC (1-14)	
CN6002	QGF1207F1-13	CONNECTOR	FFC/FPC (1-13)	
CN6003	QGF1207F1-07	CONNECTOR	FFC/FPC (1-7)	
OT1	LP31391-001A	SPECIAL SCREW	TUNER(x6)	
OT2	LP40229-002A	PLATE		
OT3	LP40229-002A	PLATE		
TU6001	QAU0299-001	TUNER		C
TU6001	QAU0323-001	TUNER		A,B,D,E
TU6002	QAU0299-001	TUNER		C
TU6002	QAU0323-001	TUNER		A,B,D,E
TU6003	QNZ0681-001	RF CONNECTOR		

MODEL	MARK	MODEL	MARK
DR-MV1BEK	A	DR-MV1SEK	D
DR-MV1BEU	B	DR-MV1SEU	E
DR-MV1SEF	C		

Operation / jack board

Block No. [2][7]

⚠ Symbol No.	Part No.	Part Name	Description	Local
PW1	LPA10248-01C5	OPERATION/JACK BOARD ASSY		
D7202	1SS133-T2	DIODE		
D7202 or	1SS270A-T2	SI DIODE		
D7203	1SS133-T2	DIODE		
D7203 or	1SS270A-T2	SI DIODE		
D7204	RD6.8ES/B1/-T2	Z DIODE		
D7204 or	MTZJ6.8A-T2	Z DIODE		
D7221	SLA-580BC3T3F	LED	ILLUMI.	
D7221 or	SLA-580BCT3F	LED	ILLUMI.	
D7221 or	SDPB50A0/DEGH/	LED	ILLUMI.	
D7222	SLR-325VC-T	LED	VCR REC	
D7222 or	LTL-816EE-T	LED	VCR REC	
D7223	SLR-325MC-T	LED	VCR	
D7223 or	LTL-816GE-T	LED	VCR	
D7223 or	SLR-343MC-T	LED	VCR	
D7224	SLR-325VC-T	LED	VCR TIMER	
D7224 or	LTL-816EE-T	LED	VCR TIMER	
C7202	NDC21HJ-101X	C CAPACITOR	100pF 50V J	
C7203	QCBB1HJ-101Y	C CAPACITOR	100pF 50V J	
C7204	NDC21HJ-101X	C CAPACITOR	100pF 50V J	
C7205	QCBB1HJ-101Y	C CAPACITOR	100pF 50V J	
C7206	NCB21HK-103X	C CAPACITOR	0.01uF 50V K	
C7221	QCBB1HK-103Y	C CAPACITOR	0.01uF 50V K	
R7202	QRE141J-750Y	C RESISTOR	75Ω 1/4W J	
R7206	NRSA02J-750X	MG RESISTOR	75Ω 1/10W J	
R7207	NRSA02J-750X	MG RESISTOR	75Ω 1/10W J	
R7221	QRE141J-101Y	C RESISTOR	100Ω 1/4W J	
R7222	NRSA02J-331X	MG RESISTOR	330Ω 1/10W J	
R7223	NRSA02J-331X	MG RESISTOR	330Ω 1/10W J	
R7224	NRSA02J-331X	MG RESISTOR	330Ω 1/10W J	
R7225	QRE141J-103Y	C RESISTOR	10kΩ 1/4W J	
L7202	QQL071J-100Y	COIL	1.40Ω 10uH J	
L7203	QQL071J-100Y	COIL	1.40Ω 10uH J	
CN7201	QGF1209F1-13	CONNECTOR	FFC/FPC (1-13)	
CN7202	QGD2503C1-05	CONNECTOR	(1-5)	
J7201	QNN0591-001	PIN JACK	VIDEO/AUDIO	
J7204	QND0084-001	S JACK	S-VIDEO	
S7216	QSW0381-001Z	TACT SWITCH	VCR_EJECT	
S7217	QSW0381-001Z	TACT SWITCH	VCR/DVD	
S7218	QSW0381-001Z	TACT SWITCH	STANDBY/ON	
W71	NRSA02J-0R0X	MG RESISTOR	0Ω 1/10W J	
W72	NRSA02J-0R0X	MG RESISTOR	0Ω 1/10W J	
WR7201	QUB221-10A4XL	SIN TWIST WIRE		

Switch / display board

Block No. [2][8]

⚠ Symbol No.	Part No.	Part Name	Description	Local
PW1	LPA10248-01C4	SWITCH/DISPLAY BOARD ASSY		
IC7001	UPD16315GB-3BS	IC		
IC7001 or	PT6315	IC		
IC7002	GP1UM281XK	IR DETECT UNIT 38kHz		
IC7002 or	PNA4652M00XB	IR DETECT UNIT 38kHz		
D7001	1SS133-T2	DIODE		
D7001 or	1SS270A-T2	SI DIODE		
D7002	1SS133-T2	DIODE		
D7002 or	1SS270A-T2	SI DIODE		
D7003	1SS133-T2	DIODE		
D7003 or	1SS270A-T2	SI DIODE		
D7004	1SS133-T2	DIODE		
D7004 or	1SS270A-T2	SI DIODE		
D7005	1SS133-T2	DIODE		
D7005 or	1SS270A-T2	SI DIODE		
D7012	1SS133-T2	DIODE		
D7012 or	1SS270A-T2	SI DIODE		
D7013	1SS133-T2	DIODE		
D7013 or	1SS270A-T2	SI DIODE		
D7014	1SS133-T2	DIODE		
D7014 or	1SS270A-T2	SI DIODE		
D7015	1SS133-T2	DIODE		
D7015 or	1SS270A-T2	SI DIODE		
D7021	RD9.1ES/B2/-T2	Z DIODE		
D7021 or	MTZJ9.1B-T2	Z DIODE		
D7041	SLR-325VC-T	LED	DVD REC	
D7041 or	LTL-816EE-T	LED	DVD REC	
D7042	SLR-325MC-T	LED	VCR->DVD	
D7042 or	LTL-816GE-T	LED	VCR->DVD	
D7042 or	SLR-343MC-T	LED	VCR->DVD	
D7043	SLR-325VC-T	LED	DUBBING	
D7043 or	LTL-816EE-T	LED	DUBBING	
D7044	SLR-325MC-T	LED	DVD->VCR	
D7044 or	LTL-816GE-T	LED	DVD->VCR	
D7044 or	SLR-343MC-T	LED	DVD->VCR	
D7045	SLA-580BC3T3F	LED	ILLUMI.	
D7045 or	SLA-580BCT3F	LED	ILLUMI.	
D7045 or	SDPB50A0/DEGH/	LED	ILLUMI.	
D7046	SLR-325VC-T	LED	DVD TIMER	
D7046 or	LTL-816EE-T	LED	DVD TIMER	
D7047	SLR-325MC-T	LED	DVD	
D7047 or	LTL-816GE-T	LED	DVD	
D7047 or	SLR-343MC-T	LED	DVD	
C7001	NCB21EK-104X	C CAPACITOR	0.1uF 25V K	
C7002	QCFB1HZ-104Y	C CAPACITOR	0.1uF 50V Z	
C7003	QEKJ1HM-106Z	E CAPACITOR	10uF 50V M	
C7006	QEKC0JM-227Z	E CAPACITOR	220uF 6.3V M	
C7008	QERF1AM-227Z	E CAPACITOR	220uF 10V M	
C7010	NCF31HZ-473X	C CAPACITOR	0.047uF 50V Z	
C7011	NCF31HZ-473X	C CAPACITOR	0.047uF 50V Z	
C7013	QCBB1HK-103Y	C CAPACITOR	0.01uF 50V K	
R7001	QRE141J-103Y	C RESISTOR	10kΩ 1/4W J	
R7002	QRE141J-103Y	C RESISTOR	10kΩ 1/4W J	
R7003	QRE141J-823Y	C RESISTOR	82kΩ 1/4W J	
R7005	QRE141J-472Y	C RESISTOR	4.7kΩ 1/4W J	
R7006	QRE141J-472Y	C RESISTOR	4.7kΩ 1/4W J	
R7007	QRE141J-102Y	C RESISTOR	1kΩ 1/4W J	
R7009	QRE141J-103Y	C RESISTOR	10kΩ 1/4W J	
R7010	NRSA02J-103X	MG RESISTOR	10kΩ 1/10W J	
R7013	QRE141J-333Y	C RESISTOR	33kΩ 1/4W J	
R7014	QRE141J-333Y	C RESISTOR	33kΩ 1/4W J	
R7015	NRSA02J-102X	MG RESISTOR	1kΩ 1/10W J	
R7041	QRE141J-331Y	C RESISTOR	330Ω 1/4W J	
R7042	QRE141J-331Y	C RESISTOR	330Ω 1/4W J	
R7043	QRE141J-331Y	C RESISTOR	330Ω 1/4W J	
R7044	QRE141J-331Y	C RESISTOR	330Ω 1/4W J	
R7045	QRE141J-101Y	C RESISTOR	100Ω 1/4W J	
R7046	QRE141J-331Y	C RESISTOR	330Ω 1/4W J	
R7047	QRE141J-331Y	C RESISTOR	330Ω 1/4W J	
R7053	QRE141J-103Y	C RESISTOR	10kΩ 1/4W J	
CN7001	QGF1207C1-11	CONNECTOR	FFC/FPC (1-11)	
CN7002	QGF1209C1-04	CONNECTOR	FFC/FPC (1-4)	
DI7001	QLF0124-001	FL TUBE		
FW7001	QUM025-07A4BF	PARA RIBON WIRE		
HD1	PQ34949-1-1	FDP HOLDER(L)		
HD2	PQ34950-1-1	FDP HOLDER(R)		
OT1	LP30002-0F8A	SPACER		
S7002	QSW0381-001Z	TACT SWITCH	PR+	
S7004	QSW0381-001Z	TACT SWITCH	VCR-DVD	
S7005	QSW0381-001Z	TACT SWITCH	DUB	
S7012	QSW0381-001Z	TACT SWITCH	DVD-VCR	
S7013	QSW0381-001Z	TACT SWITCH	SLOW+	
S7014	QSW0381-001Z	TACT SWITCH	PAUSE	
S7015	QSW0381-001Z	TACT SWITCH	STOP	
S7022	QSW0381-001Z	TACT SWITCH	PR-	
S7023	QSW0381-001Z	TACT SWITCH	REC MODE	
S7024	QSW0381-001Z	TACT SWITCH	SAT	
S7032	QSW0381-001Z	TACT SWITCH	OPEN/CLOSE	
S7033	QSW0381-001Z	TACT SWITCH	SLOW-	

MODEL	MARK	MODEL	MARK
DR-MV1BEK	A	DR-MV1SEK	D
DR-MV1BEU	B	DR-MV1SEU	E
DR-MV1SEF	C		

⚠ Symbol No.	Part No.	Part Name	Description	Local
S7034	QSW0381-001Z	TACT SWITCH	REC	
S7035	QSW0381-001Z	TACT SWITCH	PLAY	
W41	NRSA02J-0R0X	MG RESISTOR	0Ω 1/10W J	
W43	NRSA02J-0R0X	MG RESISTOR	0Ω 1/10W J	
W44	NRSA02J-0R0X	MG RESISTOR	0Ω 1/10W J	

Jack board

Block No. [3][6]

⚠ Symbol No.	Part No.	Part Name	Description	Local
PW1	LPA10248-01C3	JACK BOARD ASSY		
B4121	NRSA02J-0R0X	MG RESISTOR	0Ω 1/10W J	
B4122	NRSA02J-0R0X	MG RESISTOR	0Ω 1/10W J	
B4123	NRSA02J-0R0X	MG RESISTOR	0Ω 1/10W J	
B4124	NRSA02J-0R0X	MG RESISTOR	0Ω 1/10W J	
CN4104	QGB2027M1-10S	CONNECTOR	B-B (1-10)	
J4112	QNZ0675-001	D CONNECTOR	DV IN	
K4101	NRSA02J-0R0X	MG RESISTOR	0Ω 1/10W J	
K4102	NRSA02J-0R0X	MG RESISTOR	0Ω 1/10W J	
K4103	NRSA02J-0R0X	MG RESISTOR	0Ω 1/10W J	
K4104	NRSA02J-0R0X	MG RESISTOR	0Ω 1/10W J	
OT1	QZW0021-001	PC SUPPORT		
W31	NRSA02J-0R0X	MG RESISTOR	0Ω 1/10W J	

Loading motor board

Block No. [5][5]

⚠ Symbol No.	Part No.	Part Name	Description	Local
PW1	LPA10158-01A2	LOADING MOTOR BOARD ASSY		

Video switch board

Block No. [8][3]

⚠ Symbol No.	Part No.	Part Name	Description	Local
PW1	LPA10233-02C2	VIDEO SWITCH BOARD ASSY		C
PW1	LPA10233-01C2	VIDEO SWITCH BOARD ASSY		A,B,D,E
IC501	JCP8038-I	IC		
IC501 or	JCP8038	IC		
IC502	LC74793	IC		
Q503	2SD601A/QRS/-X	TRANSISTOR		
Q503 or	2SC2412K/QRS/-X	TRANSISTOR		
Q503 or	2SC3928A/QRS/-X	TRANSISTOR		
Q504	2SB709A/QR/-X	TRANSISTOR		
Q504 or	2SA1037AK/QR/-X	TRANSISTOR		
Q504 or	2SA1530A/QR/-X	TRANSISTOR		
Q505	2SB709A/QR/-X	TRANSISTOR		
Q505 or	2SA1037AK/QR/-X	TRANSISTOR		
Q505 or	2SA1530A/QR/-X	TRANSISTOR		
Q506	2SB709A/QR/-X	TRANSISTOR		
Q506 or	2SA1037AK/QR/-X	TRANSISTOR		
Q506 or	2SA1530A/QR/-X	TRANSISTOR		
D501	DA204U-X	SI DIODE		
D502	DA204U-X	SI DIODE		
C501	QEKJ0JM-476Z	E CAPACITOR	47uF 6.3V M	
C502	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C503	NCF31AZ-105X	C CAPACITOR	1uF 10V Z	
C505	NCB31EK-103X	C CAPACITOR	0.01uF 25V K	
C506	NCB31EK-103X	C CAPACITOR	0.01uF 25V K	
C508	NCF31AZ-105X	C CAPACITOR	1uF 10V Z	
C510	NCB31EK-103X	C CAPACITOR	0.01uF 25V K	
C512	NCB31EK-103X	C CAPACITOR	0.01uF 25V K	
C513	NCF31AZ-105X	C CAPACITOR	1uF 10V Z	
C515	NCB31EK-103X	C CAPACITOR	0.01uF 25V K	
C516	NCB31EK-103X	C CAPACITOR	0.01uF 25V K	
C518	NCF31AZ-105X	C CAPACITOR	1uF 10V Z	
C519	NCF31AZ-105X	C CAPACITOR	1uF 10V Z	
C521	NCB31EK-103X	C CAPACITOR	0.01uF 25V K	
C522	NCB31EK-103X	C CAPACITOR	0.01uF 25V K	
C523	NCB31EK-103X	C CAPACITOR	0.01uF 25V K	
C524	NCB31EK-103X	C CAPACITOR	0.01uF 25V K	
C525	NCB31EK-103X	C CAPACITOR	0.01uF 25V K	
C526	NCB31EK-103X	C CAPACITOR	0.01uF 25V K	
C527	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C528	QEKJ1EM-106Z	E CAPACITOR	10uF 25V M	
C529	QEKJ0JM-476Z	E CAPACITOR	47uF 6.3V M	
C530	NCB31EK-103X	C CAPACITOR	0.01uF 25V K	
C533	NCB31EK-103X	C CAPACITOR	0.01uF 25V K	
C534	QEKJ1HM-475Z	E CAPACITOR	4.7uF 50V M	
C535	NCB31EK-103X	C CAPACITOR	0.01uF 25V K	
C536	NCB31EK-103X	C CAPACITOR	0.01uF 25V K	
C537	NCB31EK-103X	C CAPACITOR	0.01uF 25V K	
C539	NCB31EK-103X	C CAPACITOR	0.01uF 25V K	
C540	NCB31EK-103X	C CAPACITOR	0.01uF 25V K	
C541	NCB31EK-103X	C CAPACITOR	0.01uF 25V K	
C543	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C545	QEKJ1HM-225Z	E CAPACITOR	2.2uF 50V M	
C546	NCB31EK-103X	C CAPACITOR	0.01uF 25V K	
C547	NCB31EK-103X	C CAPACITOR	0.01uF 25V K	
C549	NDC31HJ-100X	C CAPACITOR	10pF 50V J	
C550	NDC31HJ-820X	C CAPACITOR	82pF 50V J	
C556	NCB31EK-103X	C CAPACITOR	0.01uF 25V K	
C557	QEKJ0JM-476Z	E CAPACITOR	47uF 6.3V M	
C558	NCB31EK-103X	C CAPACITOR	0.01uF 25V K	
C559	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C571	QEKJ0JM-227Z	E CAPACITOR	220uF 6.3V M	
C572	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C573	NCF31AZ-105X	C CAPACITOR	1uF 10V Z	
C574	NCF31AZ-105X	C CAPACITOR	1uF 10V Z	
C577	NCB31CK-563X	C CAPACITOR	0.056uF 16V K	
C578	QEKJ1HM-475Z	E CAPACITOR	4.7uF 50V M	
C579	NCB31AK-224X	C CAPACITOR	0.22uF 10V K	
C580	QEKJ0JM-227Z	E CAPACITOR	220uF 6.3V M	
C581	NCB31EK-103X	C CAPACITOR	0.01uF 25V K	
R501	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
R503	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
R504	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
R505	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
R507	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
R509	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
R510	NRSA63J-332X	MG RESISTOR	3.3kΩ 1/16W J	
R511	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
R512	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
R518	NRSA63J-182X	MG RESISTOR	1.8kΩ 1/16W J	
R521	NRSA63J-271X	MG RESISTOR	270Ω 1/16W J	
R526	NRSA63J-102X	MG RESISTOR	1kΩ 1/16W J	
R527	NRSA63J-562X	MG RESISTOR	5.6kΩ 1/16W J	
R528	NRSA63J-562X	MG RESISTOR	5.6kΩ 1/16W J	
R529	NRSA63J-222X	MG RESISTOR	2.2kΩ 1/16W J	
R533	NRSA63J-472X	MG RESISTOR	4.7kΩ 1/16W J	
R534	NRSA63J-222X	MG RESISTOR	2.2kΩ 1/16W J	
R535	NRSA63J-152X	MG RESISTOR	1.5kΩ 1/16W J	
R542	NRSA63J-102X	MG RESISTOR	1kΩ 1/16W J	
R545	NRSA63J-471X	MG RESISTOR	470Ω 1/16W J	
R546	NRSA63J-471X	MG RESISTOR	470Ω 1/16W J	
R547	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
R548	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
R571	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J	
R573	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J	
R574	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
R575	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
R577	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
R578	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	C
R579	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J	
R580	NRSA63J-272X	MG RESISTOR	2.7kΩ 1/16W J	
R581	NRSA63J-562X	MG RESISTOR	5.6kΩ 1/16W J	

MODEL	MARK	MODEL	MARK
DR-MV1BEK	A	DR-MV1SEK	D
DR-MV1BEU	B	DR-MV1SEU	E
DR-MV1SEF	C		

⚠ Symbol No.	Part No.	Part Name	Description	Local
L501	QQL29BJ-100Z	P COIL	0.40Ω 10uH J	
L502	QQL29BJ-100Z	P COIL	0.40Ω 10uH J	
L504	QQL231J-330Y	COIL	4.7Ω 33uH J	
L508	QQL29BJ-100Z	P COIL	0.40Ω 10uH J	
B501	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
BK1	LP40425-001A	BRACKET(PWB)		
CN501	QGF1208F1-04	CONNECTOR	FFC/FPC (1-4)	
CN502	QGG2503K2-20	CONNECTOR	(1-20)	
CN504	QGF1208F1-06	CONNECTOR	FFC/FPC (1-6)	C
W51	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
W52	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
W53	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
W54	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
W55	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
W56	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
W57	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	

SECAM board

Block No. [8][8]

⚠ Symbol No.	Part No.	Part Name	Description	Local
PW1	LPA20037-01B	SECAM BOARD ASSY		C
IC301	LA7358	IC		C
IC4301	LA7357M-W	IC		C
IC4304	74HC4538D-X	IC		C
Q301	2SA1037AK/QR/-X	TRANSISTOR		C
Q301 or	2SB709A/QR/-X	TRANSISTOR		C
Q301 or	2SA1530A/QR/-X	TRANSISTOR		C
Q302	DTA144WKA-X	TRANSISTOR		C
Q302 or	UN211E-X	DIGI TRANSISTOR		C
Q302 or	RT1P44HC-X	DIGI TRANSISTOR		C
Q4301	2SD601A/QRS/-X	TRANSISTOR		C
Q4301 or	2SC2412K/QRS/-X	TRANSISTOR		C
Q4301 or	2SC3928A/QRS/-X	TRANSISTOR		C
Q4302	2SB709A/QR/-X	TRANSISTOR		C
Q4302 or	2SA1037AK/QR/-X	TRANSISTOR		C
Q4302 or	2SA1530A/QR/-X	TRANSISTOR		C
Q4303	2SB709A/QR/-X	TRANSISTOR		C
Q4303 or	2SA1037AK/QR/-X	TRANSISTOR		C
Q4303 or	2SA1530A/QR/-X	TRANSISTOR		C
D4301	1SS133-T2	DIODE		C
C301	NDC31HJ-151X	C CAPACITOR	150pF 50V J	C
C302	QEKJ1HM-225Z	E CAPACITOR	2.2uF 50V M	C
C303	NCB31EK-682X	C CAPACITOR	6800pF 25V K	C
C304	NCB31EK-682X	C CAPACITOR	6800pF 25V K	C
C305	NCB31EK-103X	C CAPACITOR	0.01uF 25V K	C
C307	NDC31HJ-151X	C CAPACITOR	150pF 50V J	C
C308	NCB31EK-103X	C CAPACITOR	0.01uF 25V K	C
C309	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	C
C310	NCB31EK-103X	C CAPACITOR	0.01uF 25V K	C
C311	NCB31EK-103X	C CAPACITOR	0.01uF 25V K	C
C312	NCB31HK-102X	C CAPACITOR	1000pF 50V K	C
C313	QEKJ1HM-474Z	E CAPACITOR	0.47uF 50V M	C
C315	QEKJ1HM-105Z	E CAPACITOR	1uF 50V M	C
C316	NCB31EK-103X	C CAPACITOR	0.01uF 25V K	C
C317	NCB31HK-681X	C CAPACITOR	680pF 50V K	C
C318	NCB31EK-223X	C CAPACITOR	0.022uF 25V K	C
C319	QEKJ1HM-105Z	E CAPACITOR	1uF 50V M	C
C320	NCB31EK-103X	C CAPACITOR	0.01uF 25V K	C
C321	NDC31HG-301X	C CAPACITOR	300pF 50V G	C
C322	NCB31AK-474X	C CAPACITOR	0.47uF 10V K	C
C323	QEKJ0JM-476Z	E CAPACITOR	47uF 6.3V M	C
C4301	NCB31EK-103X	C CAPACITOR	0.01uF 25V K	C
C4302	QEKJ1CM-476Z	E CAPACITOR	47uF 16V M	C
C4304	NCB31EK-103X	C CAPACITOR	0.01uF 25V K	C
C4305	NCB31EK-103X	C CAPACITOR	0.01uF 25V K	C
C4306	NCB31EK-103X	C CAPACITOR	0.01uF 25V K	C
C4307	NCB31EK-103X	C CAPACITOR	0.01uF 25V K	C
C4308	NCB31EK-103X	C CAPACITOR	0.01uF 25V K	C
C4309	NCB31EK-103X	C CAPACITOR	0.01uF 25V K	C
C4310	NDC31HJ-471X	C CAPACITOR	470pF 50V J	C
C4318	NCB31EK-104X	C CAPACITOR	0.1uF 25V K	C
C4319	NDC31HJ-471X	C CAPACITOR	470pF 50V J	C
R301	NRSA63J-273X	MG RESISTOR	27kΩ 1/16W J	C
R302	NRSA63J-124X	MG RESISTOR	120kΩ 1/16W J	C
R303	NRSA63J-273X	MG RESISTOR	27kΩ 1/16W J	C
R304	NRSA63J-682X	MG RESISTOR	6.8kΩ 1/16W J	C
R305	NRSA63J-473X	MG RESISTOR	47kΩ 1/16W J	C
R306	NRSA63J-273X	MG RESISTOR	27kΩ 1/16W J	C
R307	NRSA63J-222X	MG RESISTOR	2.2kΩ 1/16W J	C
R308	NRSA63J-222X	MG RESISTOR	2.2kΩ 1/16W J	C
R309	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	C
R310	NRSA63J-223X	MG RESISTOR	22kΩ 1/16W J	C
R311	NRSA63J-472X	MG RESISTOR	4.7kΩ 1/16W J	C
R312	NRSA63J-272X	MG RESISTOR	2.7kΩ 1/16W J	C
R313	NRSA63J-223X	MG RESISTOR	22kΩ 1/16W J	C
R314	NRSA63D-243X	MG RESISTOR	24kΩ 1/16W D	C
R315	NRSA63J-564X	MG RESISTOR	560kΩ 1/16W J	C
R316	NRSA63J-124X	MG RESISTOR	120kΩ 1/16W J	C
R329	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	C
R4301	NRSA63J-561X	MG RESISTOR	560Ω 1/16W J	C
R4302	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	C
R4304	NRSA63J-223X	MG RESISTOR	22kΩ 1/16W J	C
R4305	NRSA63J-562X	MG RESISTOR	5.6kΩ 1/16W J	C
R4306	NRSA63J-122X	MG RESISTOR	1.2kΩ 1/16W J	C
R4307	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J	C
R4308	NRSA63J-223X	MG RESISTOR	22kΩ 1/16W J	C
R4309	NRSA63J-222X	MG RESISTOR	2.2kΩ 1/16W J	C
R4310	NRSA63J-822X	MG RESISTOR	8.2kΩ 1/16W J	C
R4311	NRSA63J-123X	MG RESISTOR	12kΩ 1/16W J	C
R4312	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	C
R4317	NRSA63J-223X	MG RESISTOR	22kΩ 1/16W J	C
R4318	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J	C
R4319	NRSA63J-123X	MG RESISTOR	12kΩ 1/16W J	C
R4320	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	C
L301	QQL29BJ-100Z	P COIL	0.40Ω 10uH J	C
L302	QQL231J-6R8Y	COIL	2.0Ω 6.8uH J	C
L303	QQL231J-270Y	COIL	4.7Ω 27uH J	C
L4301	QQL29BJ-100Z	P COIL	0.40Ω 10uH J	C
CN301	QGF1207C1-15	CONNECTOR	FFC/FPC (1-15)	C
CN4302	QGF1207C1-06	CONNECTOR	FFC/FPC (1-6)	C
W1	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	C
W2	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	C
W3	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	C
W4	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	C
W5	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	C

Junction board

Block No. [9][2]

⚠ Symbol No.	Part No.	Part Name	Description	Local
PW1	LPA10248-01C2	JUNCTION BOARD ASSY		
IC5501	MM1662GH-X	IC		
IC5502	MM1565AF-X	IC		
IC5503	MM1565AF-X	IC		
IC5504	MM1563EF-X	IC		
IC5505	MM1563DF-X	IC		
IC8001	BA15218F-XE	IC		
IC8001 or	RC4558D-X	IC		
IC8002	AK5381VTP-X	IC		
IC8002 or	AK5357VT-X	IC		
IC8201	BA15218F-XE	IC		
IC8201 or	RC4558D-X	IC		
IC8202	AK4381VT-X	IC		
IC8202 or	AK4385VT-X	IC		

MODEL	MARK	MODEL	MARK
DR-MV1BEK	A	DR-MV1SEK	D
DR-MV1BEU	B	DR-MV1SEU	E
DR-MV1SEF	C		

⚠ Symbol No.	Part No.	Part Name	Description	Local
Q5501	2SD1819A/QRS/-X	TRANSISTOR		
Q5501 or	2SC4081/QRS/-X	TRANSISTOR		
Q5501 or	2PC4081/R/-X	TRANSISTOR		
Q5502	UN5111-X	DIGI TRANSISTOR		
Q5502 or	DTA114EUA-X	DIGI TRANSISTOR		
Q5502 or	PDTA114EU-X	DIGI TRANSISTOR		
Q5502 or	RN2302-X	DIGI TRANSISTOR		
Q5502 or	RT1P141M-X	DIGI TRANSISTOR		
Q5503	2SD2144S/UV/-T	TRANSISTOR		
Q5503 or	2SC3576-JVC-T	TRANSISTOR		
Q5504	UN5211-X	DIGI TRANSISTOR		
Q5504 or	DTC114EUA-X	DIGI TRANSISTOR		
Q5504 or	PDTC114EU-X	DIGI TRANSISTOR		
Q5504 or	RN1302-X	DIGI TRANSISTOR		
Q5504 or	RT1N141M-X	DIGI TRANSISTOR		
Q5505	UN5111-X	DIGI TRANSISTOR		
Q5505 or	DTA114EUA-X	DIGI TRANSISTOR		
Q5505 or	PDTA114EU-X	DIGI TRANSISTOR		
Q5505 or	RN2302-X	DIGI TRANSISTOR		
Q5505 or	RT1P141M-X	DIGI TRANSISTOR		
Q5506	UN5211-X	DIGI TRANSISTOR		
Q5506 or	DTC114EUA-X	DIGI TRANSISTOR		
Q5506 or	PDTC114EU-X	DIGI TRANSISTOR		
Q5506 or	RN1302-X	DIGI TRANSISTOR		
Q5506 or	RT1N141M-X	DIGI TRANSISTOR		
Q7101	2SB1218A/QR/-X	TRANSISTOR		
Q7101 or	2SA1576A/QR/-X	TRANSISTOR		
Q7101 or	2PA1576/R/-X	TRANSISTOR		
Q8001	2SC4081/QRS/-X	TRANSISTOR		
Q8001 or	2PC4081/R/-X	TRANSISTOR		
Q8001 or	2SD1819A/QRS/-X	TRANSISTOR		
Q8002	2SC4081/QRS/-X	TRANSISTOR		
Q8002 or	2PC4081/R/-X	TRANSISTOR		
Q8002 or	2SD1819A/QRS/-X	TRANSISTOR		
Q8003	DTC144WUA-X	DIGI TRANSISTOR		
Q8003 or	PDTC144WU-X	DIGI TRANSISTOR		
Q8003 or	UN521E-X	DIGI TRANSISTOR		
Q8003 or	RN1309-X	DIGI TRANSISTOR		
Q8004	DTC144WUA-X	DIGI TRANSISTOR		
Q8004 or	PDTC144WU-X	DIGI TRANSISTOR		
Q8004 or	UN521E-X	DIGI TRANSISTOR		
Q8004 or	RN1309-X	DIGI TRANSISTOR		
Q8005	DTA144WUA-X	DIGI TRANSISTOR		
Q8005 or	PDTA144WU-X	DIGI TRANSISTOR		
Q8005 or	UN511E-X	DIGI TRANSISTOR		
Q8005 or	RN2309-X	DIGI TRANSISTOR		
D5501	1A3G-T2	SI DIODE		
D5501 or	10EDB20-T2	SI DIODE		
D5501 or	ERA15-02-T2	SI DIODE		
D5502	1SS133-T2	DIODE		
D5502 or	1SS270A-T2	SI DIODE		
D5503	MTZJ27C-T2	Z DIODE		
D5503 or	RD27ES/B3/-T2	Z DIODE		
C5501	NCB21AK-105X	C CAPACITOR	1uF 10V K	
C5502	QETN0JM-107Z	E CAPACITOR	100uF 6.3V M	
C5503	NCB21HK-471X	C CAPACITOR	470pF 50V K	
C5504	NCB21AK-105X	C CAPACITOR	1uF 10V K	
C5505	QETN1AM-107Z	E CAPACITOR	100uF 10V M	
C5506	NCB21HK-471X	C CAPACITOR	470pF 50V K	
C5507	NCB21AK-105X	C CAPACITOR	1uF 10V K	
C5508	QETN1AM-107Z	E CAPACITOR	100uF 10V M	
C5509	NCB21HK-471X	C CAPACITOR	470pF 50V K	
C5510	NCB21AK-105X	C CAPACITOR	1uF 10V K	
C5511	QETN0JM-107Z	E CAPACITOR	100uF 6.3V M	
C5512	NCB21HK-471X	C CAPACITOR	470pF 50V K	
C5513	NCB21AK-105X	C CAPACITOR	1uF 10V K	
C5514	QETN0JM-107Z	E CAPACITOR	100uF 6.3V M	
C5515	NCB21HK-471X	C CAPACITOR	470pF 50V K	
C7123	NDC21HJ-120X	C CAPACITOR	12pF 50V J	
C7124	NDC21HJ-6R0X	C CAPACITOR	6pF 50V J	
C8001	NDC21HJ-101X	C CAPACITOR	100pF 50V J	
C8003	NDC21HJ-101X	C CAPACITOR	100pF 50V J	
C8005	NDC21HJ-101X	C CAPACITOR	100pF 50V J	
C8007	NDC21HJ-101X	C CAPACITOR	100pF 50V J	
C8009	QEKC1EM-106Z	E CAPACITOR	10uF 25V M	

⚠ Symbol No.	Part No.	Part Name	Description	Local
C8010	QEKC1EM-106Z	E CAPACITOR	10uF 25V M	
C8011	QEKC1HM-475Z	E CAPACITOR	4.7uF 50V M	
C8012	NCB21HK-104X	C CAPACITOR	0.1uF 50V K	
C8013	QEKC0JM-107Z	E CAPACITOR	100uF 6.3V M	
C8014	NCB21HK-104X	C CAPACITOR	0.1uF 50V K	
C8015	QEKC0JM-107Z	E CAPACITOR	100uF 6.3V M	
C8016	NCB21HK-104X	C CAPACITOR	0.1uF 50V K	
C8052	QEKC1CM-107Z	E CAPACITOR	100uF 16V M	
C8053	NCB21HK-104X	C CAPACITOR	0.1uF 50V K	
C8055	NCB21HK-104X	C CAPACITOR	0.1uF 50V K	
C8057	QEKC1CM-107Z	E CAPACITOR	100uF 16V M	
C8201	QEKC1CM-476Z	E CAPACITOR	47uF 16V M	
C8202	NCB21HK-471X	C CAPACITOR	470pF 50V K	
C8203	NCB21HK-471X	C CAPACITOR	470pF 50V K	
C8204	NCB21HK-472X	C CAPACITOR	4700pF 50V K	
C8205	NCB21HK-471X	C CAPACITOR	470pF 50V K	
C8206	NCB21HK-472X	C CAPACITOR	4700pF 50V K	
C8207	NCB21HK-471X	C CAPACITOR	470pF 50V K	
C8208	QEKC1CM-476Z	E CAPACITOR	47uF 16V M	
C8209	NCB21HK-104X	C CAPACITOR	0.1uF 50V K	
C8210	QEKC0JM-337Z	E CAPACITOR	330uF 6.3V M	
C8211	NCB21HK-104X	C CAPACITOR	0.1uF 50V K	
R5501	QRE121J-561Y	C RESISTOR	560Ω 1/2W J	
R5502	QRE121J-561Y	C RESISTOR	560Ω 1/2W J	
R5503	NRSA02J-562X	MG RESISTOR	5.6kΩ 1/10W J	
R5504	NRSA02J-102X	MG RESISTOR	1kΩ 1/10W J	
R5505	NRSA02J-222X	MG RESISTOR	2.2kΩ 1/10W J	
R7101	NRSA02J-122X	MG RESISTOR	1.2kΩ 1/10W J	
R7102	NRSA02J-102X	MG RESISTOR	1kΩ 1/10W J	
R7147	NRSA02J-0R0X	MG RESISTOR	0Ω 1/10W J	
R7148	NRSA02J-0R0X	MG RESISTOR	0Ω 1/10W J	
R7149	NRSA02J-0R0X	MG RESISTOR	0Ω 1/10W J	
R7150	NRSA02J-0R0X	MG RESISTOR	0Ω 1/10W J	
R7151	NRSA02J-0R0X	MG RESISTOR	0Ω 1/10W J	
R7161	NRSA02J-0R0X	MG RESISTOR	0Ω 1/10W J	
R7162	NRSA02J-0R0X	MG RESISTOR	0Ω 1/10W J	
R8001	NRSA02J-103X	MG RESISTOR	10kΩ 1/10W J	
R8002	NRSA02J-103X	MG RESISTOR	10kΩ 1/10W J	
R8003	NRSA02J-103X	MG RESISTOR	10kΩ 1/10W J	
R8004	NRSA02J-103X	MG RESISTOR	10kΩ 1/10W J	
R8005	NRSA02J-103X	MG RESISTOR	10kΩ 1/10W J	
R8006	NRSA02J-103X	MG RESISTOR	10kΩ 1/10W J	
R8007	NRSA02J-103X	MG RESISTOR	10kΩ 1/10W J	
R8008	NRSA02J-103X	MG RESISTOR	10kΩ 1/10W J	
R8009	NRSA02J-162X	MG RESISTOR	1.6kΩ 1/10W J	
R8010	NRSA02J-152X	MG RESISTOR	1.5kΩ 1/10W J	
R8011	NRSA02J-162X	MG RESISTOR	1.6kΩ 1/10W J	
R8012	NRSA02J-152X	MG RESISTOR	1.5kΩ 1/10W J	
R8013	NRSA02J-470X	MG RESISTOR	47Ω 1/10W J	
R8014	NRSA02J-470X	MG RESISTOR	47Ω 1/10W J	
R8015	NRSA02J-470X	MG RESISTOR	47Ω 1/10W J	
R8016	NRSA02J-470X	MG RESISTOR	47Ω 1/10W J	
R8017	NRSA02J-103X	MG RESISTOR	10kΩ 1/10W J	
R8018	NRSA02J-123X	MG RESISTOR	12kΩ 1/10W J	
R8019	NRSA02J-223X	MG RESISTOR	22kΩ 1/10W J	
R8051	NRSA02J-221X	MG RESISTOR	220Ω 1/10W J	
R8052	NRSA02J-0R0X	MG RESISTOR	0Ω 1/10W J	
R8201	NRSA02J-471X	MG RESISTOR	470Ω 1/10W J	
R8202	NRSA02J-273X	MG RESISTOR	27kΩ 1/10W J	
R8203	NRSA02J-512X	MG RESISTOR	5.1kΩ 1/10W J	
R8204	NRSA02J-121X	MG RESISTOR	120Ω 1/10W J	
R8205	NRSA02J-121X	MG RESISTOR	120Ω 1/10W J	
R8206	NRSA02J-512X	MG RESISTOR	5.1kΩ 1/10W J	
R8207	NRSA02J-512X	MG RESISTOR	5.1kΩ 1/10W J	
R8208	NRSA02J-121X	MG RESISTOR	120Ω 1/10W J	
R8209	NRSA02J-121X	MG RESISTOR	120Ω 1/10W J	
R8210	NRSA02J-512X	MG RESISTOR	5.1kΩ 1/10W J	
R8211	NRSA02J-273X	MG RESISTOR	27kΩ 1/10W J	
R8212	NRSA02J-471X	MG RESISTOR	470Ω 1/10W J	
R8213	NRSA02J-470X	MG RESISTOR	47Ω 1/10W J	
R8214	NRSA02J-470X	MG RESISTOR	47Ω 1/10W J	
R8215	NRSA02J-470X	MG RESISTOR	47Ω 1/10W J	
R8216	NRSA02J-470X	MG RESISTOR	47Ω 1/10W J	
R8217	NRSA02J-103X	MG RESISTOR	10kΩ 1/10W J	
R8219	NRSA02J-432X	MG RESISTOR	4.3kΩ 1/10W J	
R8220	NRSA02J-432X	MG RESISTOR	4.3kΩ 1/10W J	
R8221	NRSA02J-432X	MG RESISTOR	4.3kΩ 1/10W J	

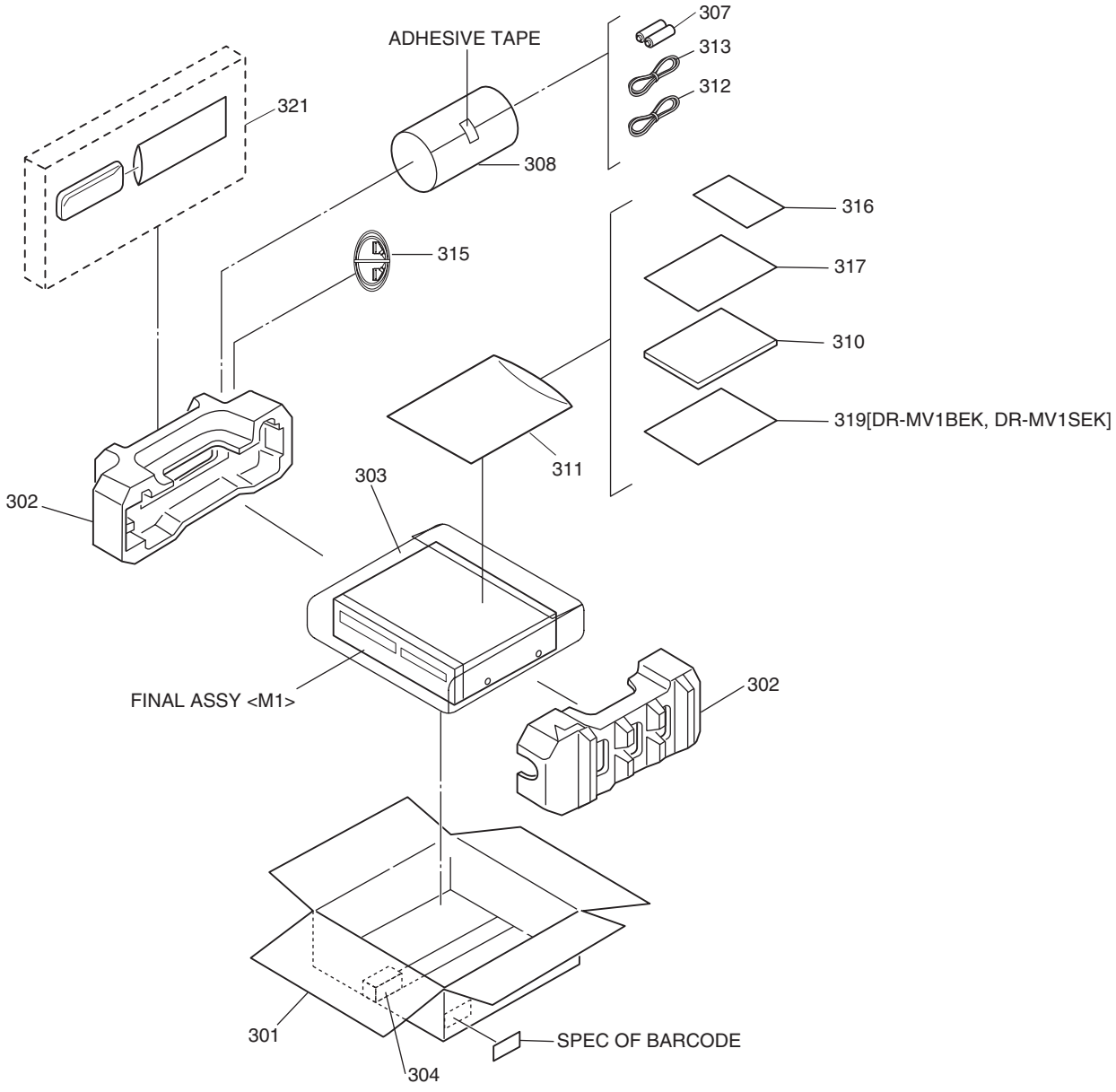
MODEL	MARK	MODEL	MARK
DR-MV1BEK	A	DR-MV1SEK	D
DR-MV1BEU	B	DR-MV1SEU	E
DR-MV1SEF	C		

⚠ Symbol No.	Part No.	Part Name	Description	Local
R8222	NRSA02J-432X	MG RESISTOR	4.3kΩ 1/10W J	
R8231	NRSA02J-222X	MG RESISTOR	2.2kΩ 1/10W J	
R8232	NRSA02J-222X	MG RESISTOR	2.2kΩ 1/10W J	
R8233	NRSA02J-102X	MG RESISTOR	1kΩ 1/10W J	
L7101	QQL29BJ-100Z	P COIL	0.40Ω 10uH J	
L7102	QQL071J-6R8Y	COIL	1.20Ω 6.8uH J	
L8001	QQL29BJ-220Z	P COIL	0.65Ω 22uH J	
L8002	QQL29BJ-220Z	P COIL	0.65Ω 22uH J	
B7101	NRSA02J-0R0X	MG RESISTOR	0Ω 1/10W J	
B7107	NRSA02J-0R0X	MG RESISTOR	0Ω 1/10W J	
B7112	NRSA02J-0R0X	MG RESISTOR	0Ω 1/10W J	
B7118	NRSA02J-0R0X	MG RESISTOR	0Ω 1/10W J	
CN5501	QGB1231M1-15	CONNECTOR	B-B (1-15)	
CN7102	QGB1231M1-15	CONNECTOR	B-B (1-15)	
CN7103	QGF1207C1-04	CONNECTOR	FFC/FPC (1-4)	
CN7104	QGF1207C1-04	CONNECTOR	FFC/FPC (1-4)	
CN7105	QGF1207C1-04	CONNECTOR	FFC/FPC (1-4)	
CN7106	QGF1016C3-04	CONNECTOR	FFC/FPC (1-4)	
CN7107	QGF1207C1-09	CONNECTOR	FFC/FPC (1-9)	
CN7108	QGB2027M6-28S	CONNECTOR	B-B (1-28)	
CN7109	QGB2027M6-28S	CONNECTOR	B-B (1-28)	
CN8001	QGB1231M1-11	CONNECTOR	B-B (1-11)	
K7101	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
K8001	NRSA02J-0R0X	MG RESISTOR	0Ω 1/10W J	
K8002	NRSA02J-0R0X	MG RESISTOR	0Ω 1/10W J	
K8201	NRSA02J-0R0X	MG RESISTOR	0Ω 1/10W J	
K8202	NRSA02J-4R7X	MG RESISTOR	4.7Ω 1/10W J	
W1	NRSA02J-0R0X	MG RESISTOR	0Ω 1/10W J	
W2	NRSA02J-0R0X	MG RESISTOR	0Ω 1/10W J	
W5	NRSA02J-0R0X	MG RESISTOR	0Ω 1/10W J	
W6	NRSA02J-0R0X	MG RESISTOR	0Ω 1/10W J	
W9	NRSA02J-0R0X	MG RESISTOR	0Ω 1/10W J	
W10	NRSA02J-0R0X	MG RESISTOR	0Ω 1/10W J	
W11	NRSA02J-0R0X	MG RESISTOR	0Ω 1/10W J	
W12	NRSA02J-0R0X	MG RESISTOR	0Ω 1/10W J	
W13	NRSA02J-0R0X	MG RESISTOR	0Ω 1/10W J	
W14	NRSA02J-0R0X	MG RESISTOR	0Ω 1/10W J	

Packing materials and accessories parts list

The instruction manual to be provided with this product will differ according to the destination.

Block No.M3MM



MODEL	MARK	MODEL	MARK
DR-MV1BEK	A	DR-MV1SEK	D
DR-MV1BEU	B	DR-MV1SEU	E
DR-MV1SEF	C		

Packing and accessories

Block No. [M][3][M][M]

⚠ Symbol No.	Part No.	Part Name	Description	Local
301	LP31338-016A	PACKING CASE		A,B
301	LP31338-013A	PACKING CASE		C,D,E
302	LP31340-001A	CUSHION ASSY		
303	PQM30021-105	POLY BAG		
304	LP31258-001A	MINI CUSHION		
307	----------	BATTERY	R6 TYPE(x2)	
308	QPC02202230P	POLY BAG	22cm x 22cm	
⚠310	LPT0939-001A	INST.BOOK	(FRENCH)	C
⚠310	LPT0938-001A	INST.BOOK	(ENGLISH)	A,D
⚠310	LPT0937-001A	INST.BOOK	(ENGLISH)	B,E
⚠310	LPT0937-002A	INST.BOOK	(GERMANY)	B,E
⚠310	LPT0937-003A	INST.BOOK	(FRENCH)	B,E
⚠310	LPT0937-004A	INST.BOOK	(DUCH)	B,E
⚠310	LPT0937-005A	INST.BOOK	(SPANISH)	B,E
⚠310	LPT0937-006A	INST.BOOK	(ITALIAN)	B,E
⚠310	LPT0937-007A	INST.BOOK	(DANISH)	B,E
⚠310	LPT0937-008A	INST.BOOK	(SWEDISH)	B,E
⚠310	LPT0937-009A	INST.BOOK	(FINNISH)	B,E
⚠310	LPT0937-010A	INST.BOOK	(NORWEGIAN)	B,E
⚠310	LPT0937-011A	INST.BOOK	(PORTUGUESE)	B,E
⚠310	LPT0937-012A	INST.BOOK	(CZECH)	B,E
⚠310	LPT0937-013A	INST.BOOK	(POLISH)	B,E
⚠310	LPT0937-014A	INST.BOOK	(HUNGARIAN)	B,E
311	QPC02503530P	POLY BAG	25cm x 35cm	
312	QAM0002-001	RF CABLE		
313	QAL0517-005	LED CABLE ASSY		
315	QAM0502-002	PERI CABLE		
316	BT-54013-7	WARRANTY CARD		B,E
317	BT-54008-6	GUARANTY CARD		A,C,D
319	LYT0194-001B	Q.CARD		A,D
321	RM-SDR006E	REMOCON		

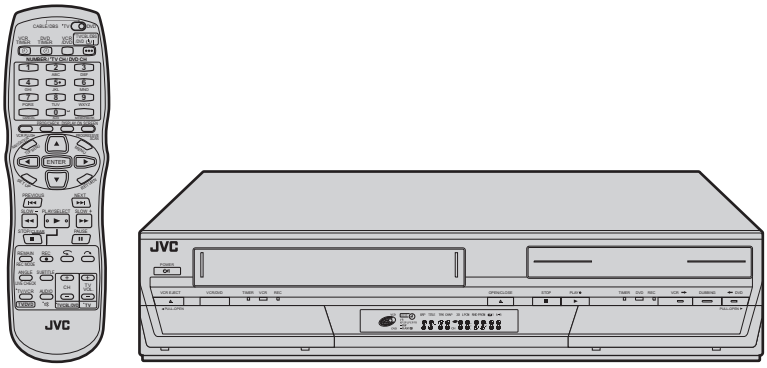
JVC

SCHEMATIC DIAGRAMS

DVD VIDEO RECORDER & VIDEO CASSETTE RECORDER

DR-MV1BEK, DR-MV1BEU, DR-MV1SEF, DR-MV1SEK, DR-MV1SEU

CD-ROM No.SML200407



DR-MV1BEK, DR-MV1BEU, DR-MV1SEF,
DR-MV1SEK, DR-MV1SEU [D3RV21]

For disassembling and assembling of MECHANISM ASSEMBLY, refer to the SERVICE MANUAL No.86700(MECHANISM ASSEMBLY).

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No.YD014SCH
2004/6

CHARTS AND DIAGRAMS

NOTES OF SCHEMATIC DIAGRAM

Safety precautions
The Components indentified by the symbol ⚠ are critical for safety. For continued safety, replace safety critical components only with manufacturer's recommended parts.

1. Units of components on the schematic diagram

Unless otherwise specified.

1) All resistance values are in ohm. 1/6 W, 1/8 W (refer to parts list).
   Chip resistors are 1/16 W.
   K: KΩ(1000Ω), M: MΩ (1000KΩ)
2) All capacitance values are in μF, (P: PF).
3) All inductance values are in μH, (m: mH).
4) All diodes are 1SS133, MA165 or 1N4148M (refer to parts list).

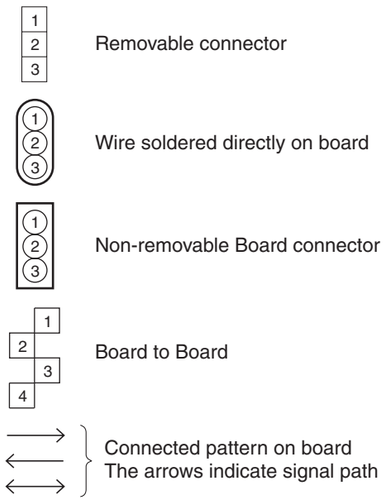
Note: The Parts Number, value and rated voltage etc. in the Schematic Diagram are for references only. When replacing the parts, refer to the Parts List.

2. Indications of control voltage

AUX : Active at high.

$\overline{AUX}$ or AUX(L) : Active at low.

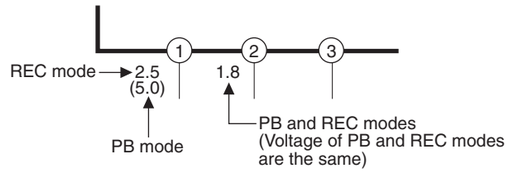
3. Interpreting Connector indications



Note: For the destination of each signal and further line connections that are cut off from the diagram, refer to "BOARD INTERCONNECTIONS"

4. Voltage measurement

1) Regulator (DC/DC CONV) circuits
   REC : Colour bar signal.
   PB : Alignment tape (Colour bar).
   — : Unmeasurable or unnecessary to measure.
2) Indication on schematic diagram
   Voltage indications for REC and PB mode on the schematic diagram are as shown below.

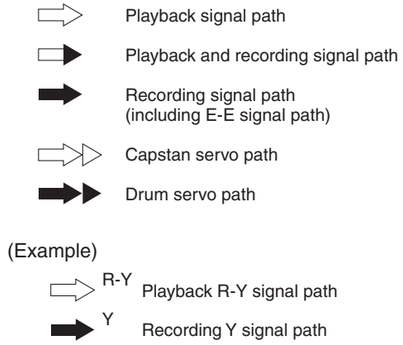


Note: If the voltages are not indicated on the schematic diagram, refer to the voltage charts.

5. Signal path Symbols

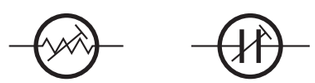
The arrows indicate the signal path as follows.

NOTE : The arrow is DVC unique object.



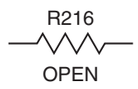
6. Indication of the parts for adjustments

The parts for the adjustments are surrounded with the circle as shown below.



7. Indication of the parts not mounted on the circuit board

"OPEN" is indicated by the parts not mounted on the circuit board.



CIRCUIT BOARD NOTES

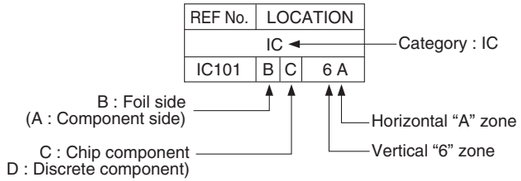
1. Foil and Component sides

1) Foil side (B side) :
   Parts on the foil side seen from foil face (pattern face) are indicated.
2) Component side (A side) :
   Parts on the component side seen from component face (parts face) indicated.

rts location are indicated by guide scale on the circuit board.

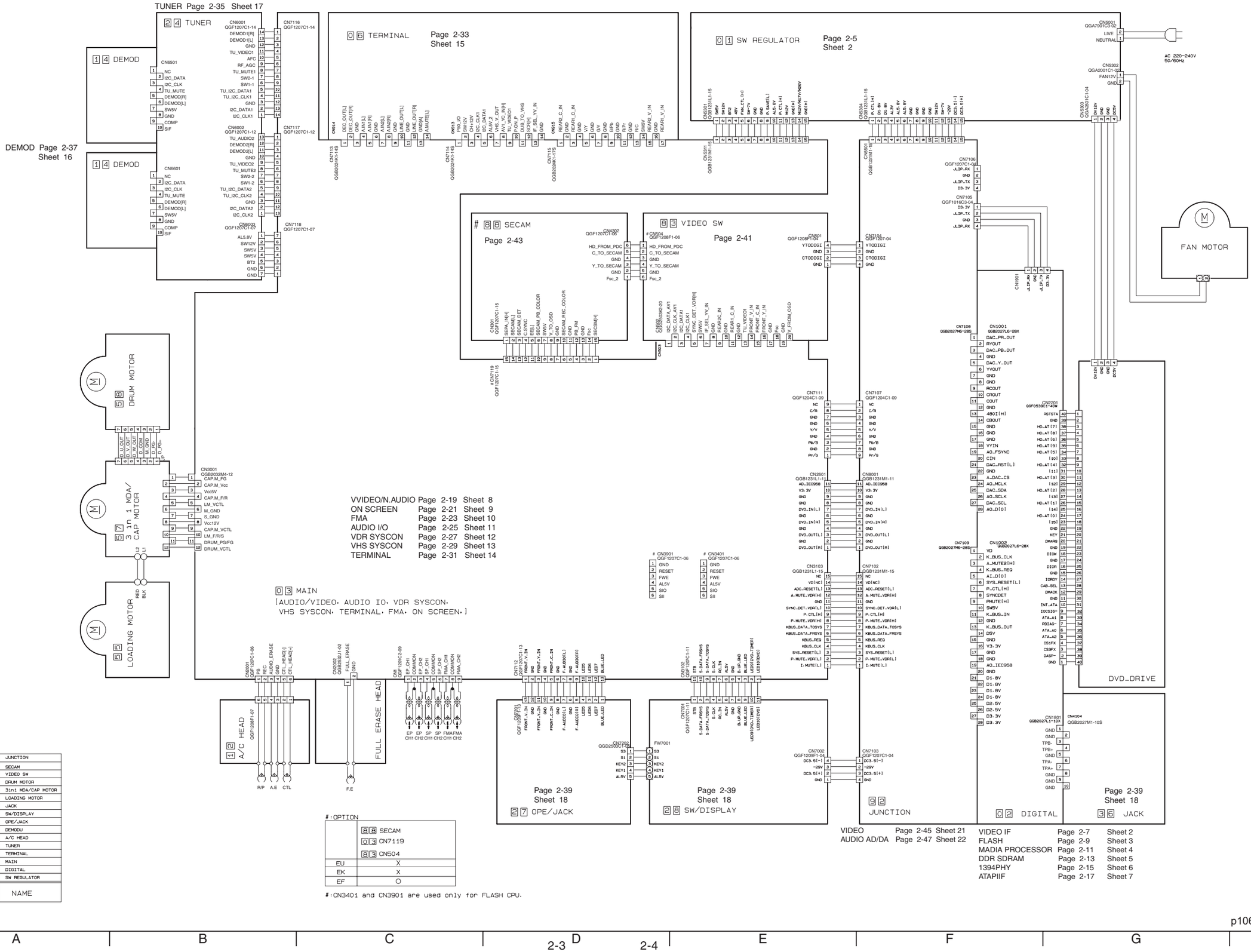
2. Parts location guides

Parts location are indicated by guide scale on the circuit board.



Note: For general information in service manual, please refer to the Service Manual of GENERAL INFORMATION Edition 4 No. 82054D (January 1994).

■ BOARD INTERCONNECTIONS



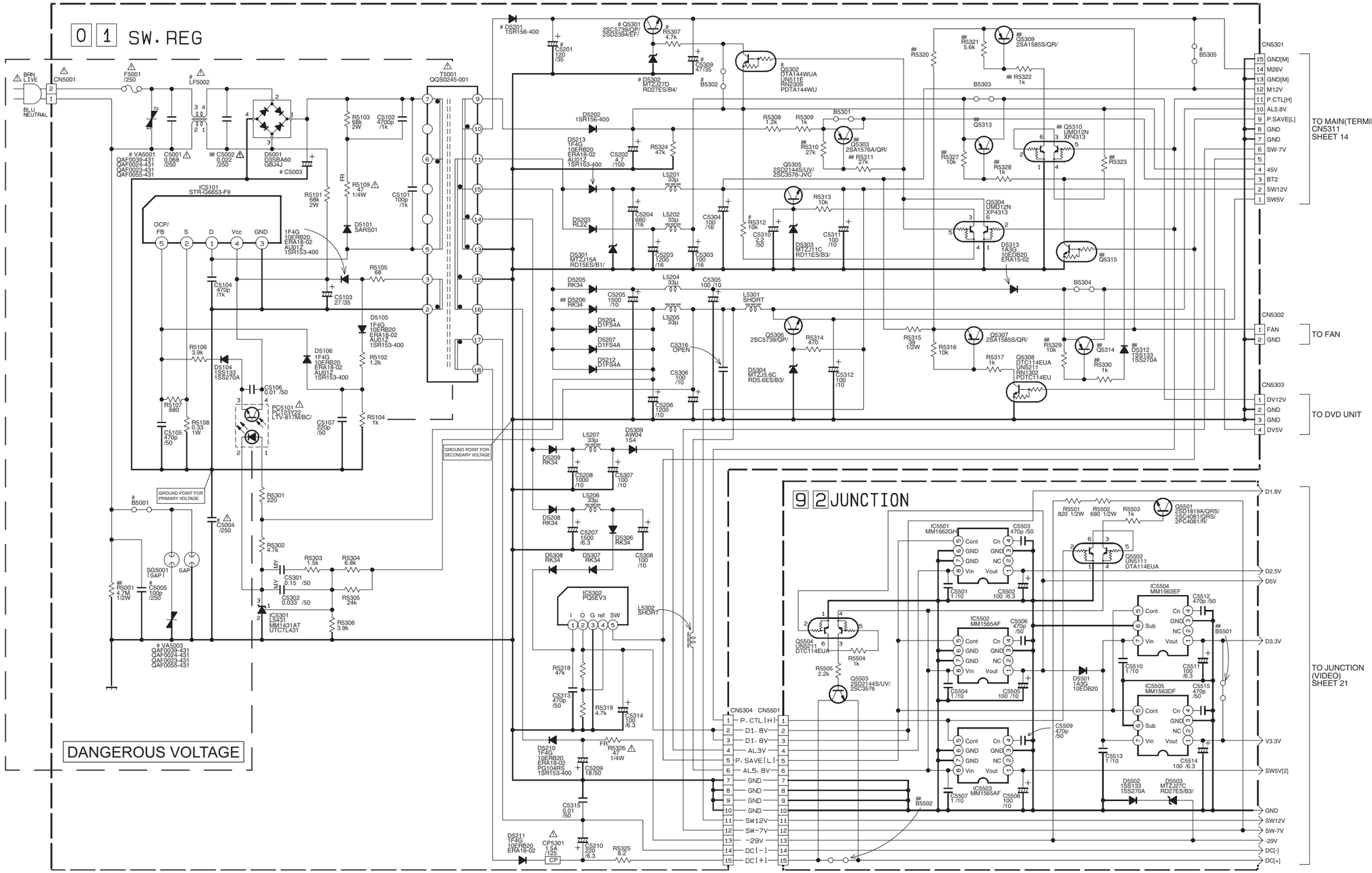
92	JUNCTION
88	SECAM
83	VIDEO SW
58	DRUM MOTOR
57	3in1 MDA/CAP MOTOR
55	LOADING MOTOR
36	JACK
28	SW/DISPLAY
27	OPE/JACK
14	DEMODU
12	A/C HEAD
07	TUNER
06	TERMINAL
03	MAIN
02	DIGITAL
01	SW REGULATOR

NO	NAME

#:OPTION	
	88 SECAM
	03 CN7119
	83 CN504
EU	X
EK	X
EF	O

#:CN3401 and CN3901 are used only for FLASH CPU.

■ SW.REG AND JUNCTION SCHEMATIC DIAGRAMS



##MARK ELEMENTS ARE NOT MOUNTED.

#DIFFERENCE TABLE 1

		B5001	B5302	B5305	C5003	C5004	C5005	F5001	Q5302	VA5001 VA5003	HIGH SPEED FF/REW C5201 C5309 D5201 D5302 Q5301 R5307 R5312	LF5002
JPN	(W/O BS)	YES	NO	NO	330 /200	4700p	YES	2A	YES	YES	YES	QQR0908-001 QQR0984-001 QQR1215-001
	(WITH BS)		YES						NO			
EURO		NO	NO	YES	82 /400	2200p	NO	T2AL	NO	NO	NO	QQR1031-001

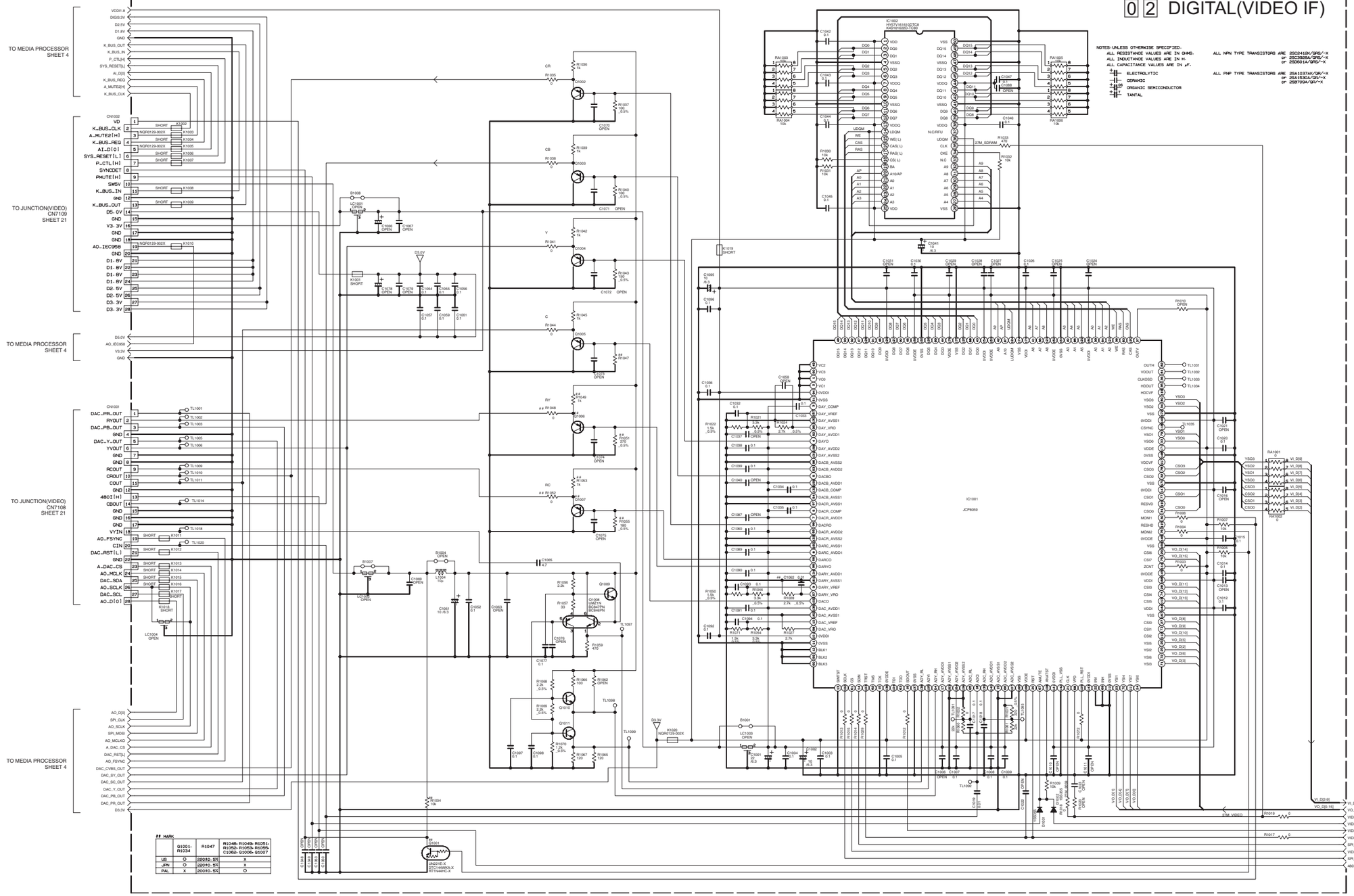
NOTES:UNLESS OTHERWISE SPECIFIED.
ALL RESISTANCE VALUES ARE IN OHMS.
ALL INDUCTANCE VALUES ARE IN H.
ALL CAPACITANCE VALUES ARE IN μF.
ELECTROLYTIC
CERAMIC
MYLER
NON POLAR

p20371001a_rev0

SHEET 1

■ DIGITAL(VIDEO IF) SCHEMATIC DIAGRAM

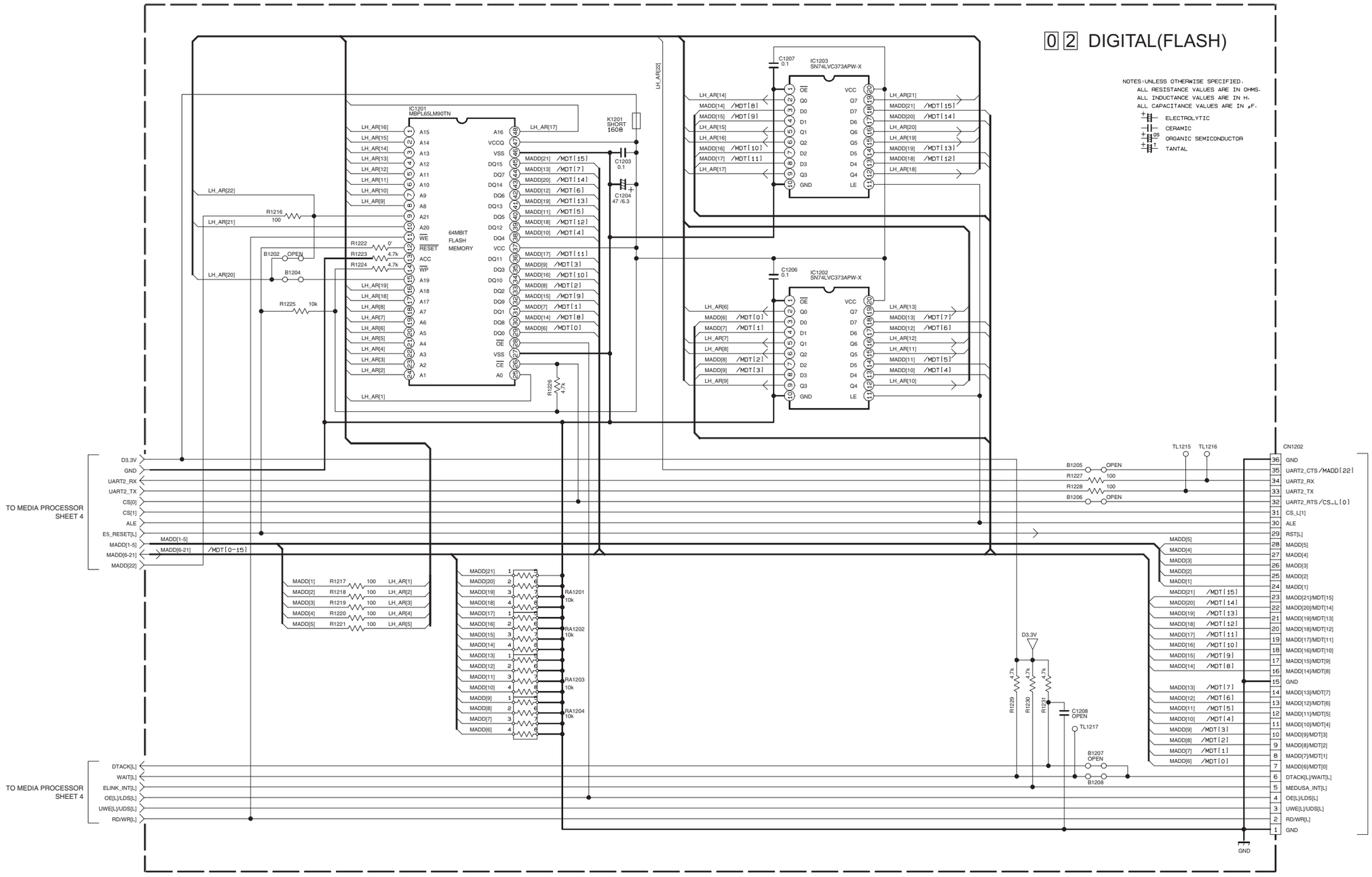
02 DIGITAL(VIDEO IF)



p10593001a_rev0

SHEET 2

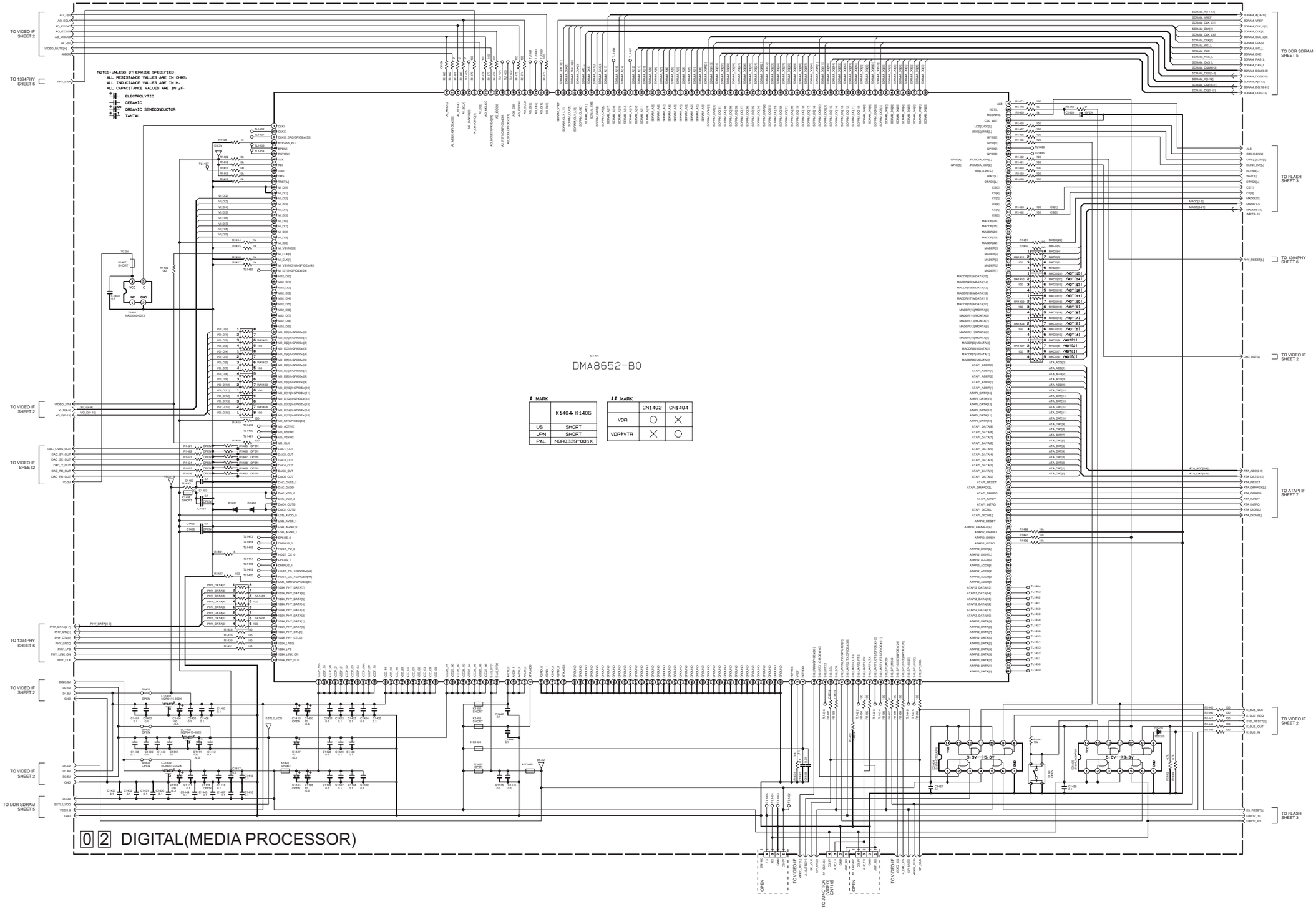
■ DIGITAL(FLASH) SCHEMATIC DIAGRAM



p20402001a_rev0

SHEET 3

■ DIGITAL(MEDIA PROCESSOR) SCHEMATIC DIAGRAM

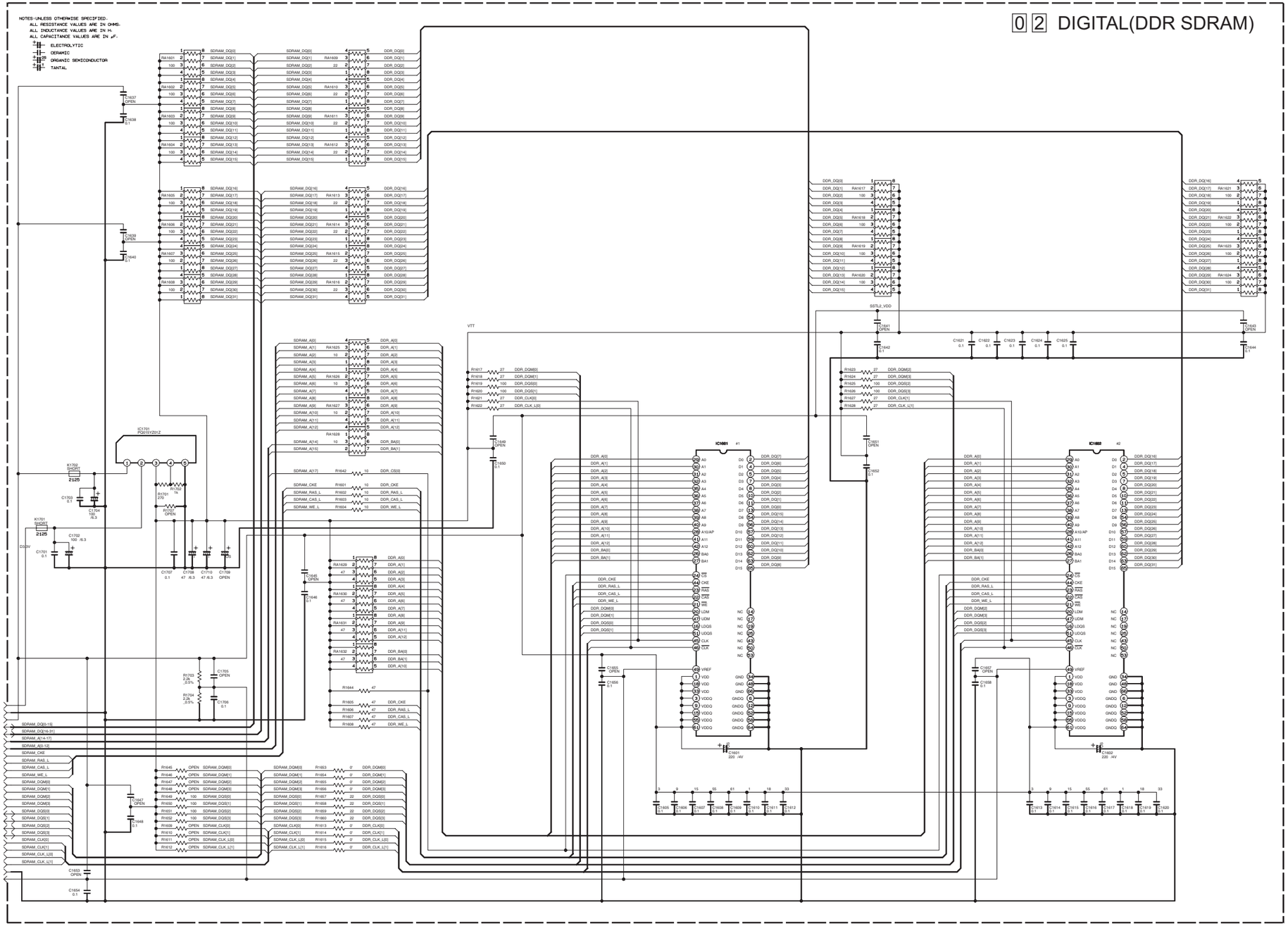


p10594001a_rev1

SHEET 4

2-11 2-12

■ DIGITAL(DDR SDRAM) SCHEMATIC DIAGRAM



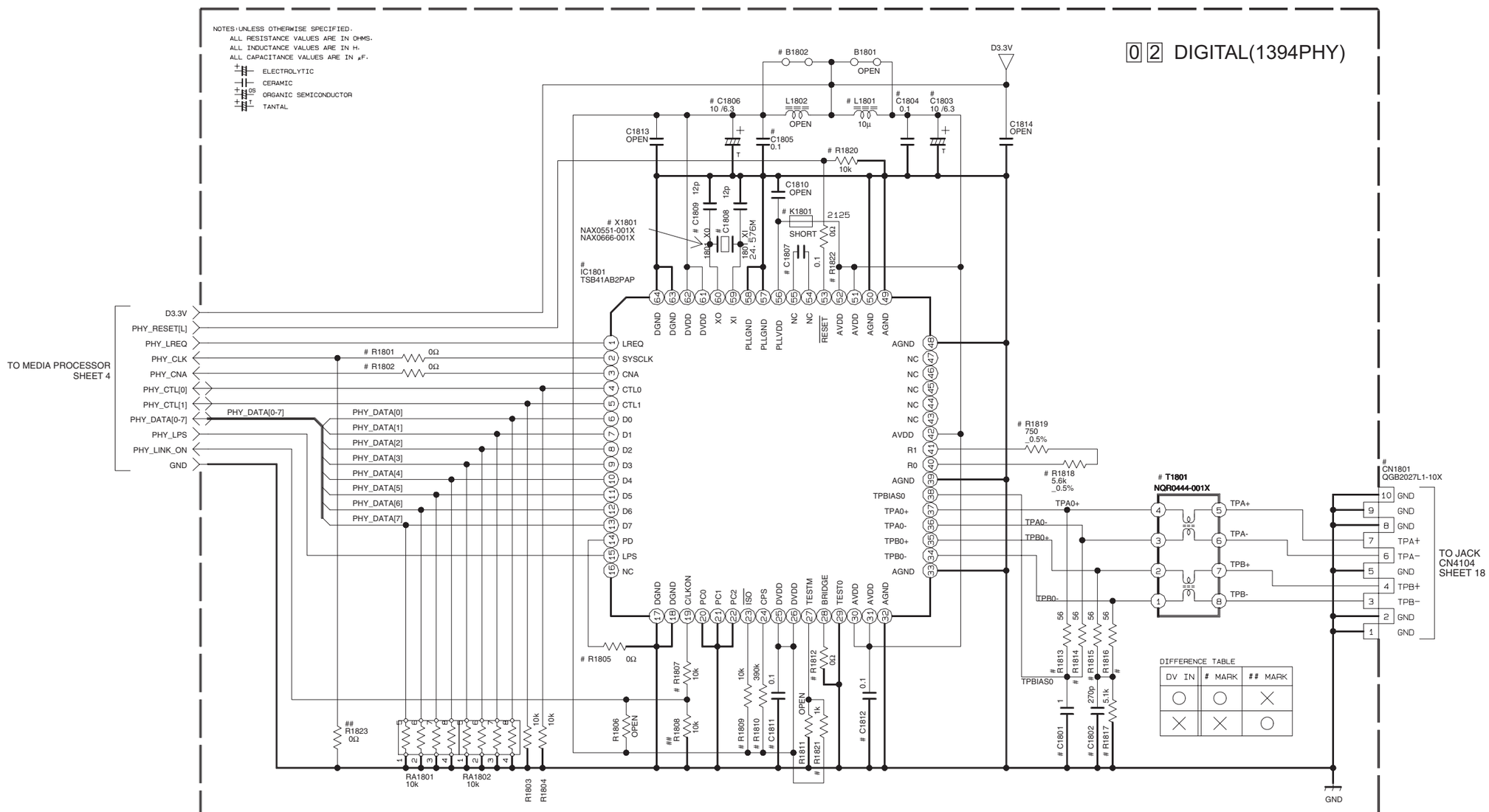
p10595001a_rev0

SHEET 5

A | B | C | D | 2-13 | 2-14 | E | F | G

■ DIGITAL(1394PHY) SCHEMATIC DIAGRAM

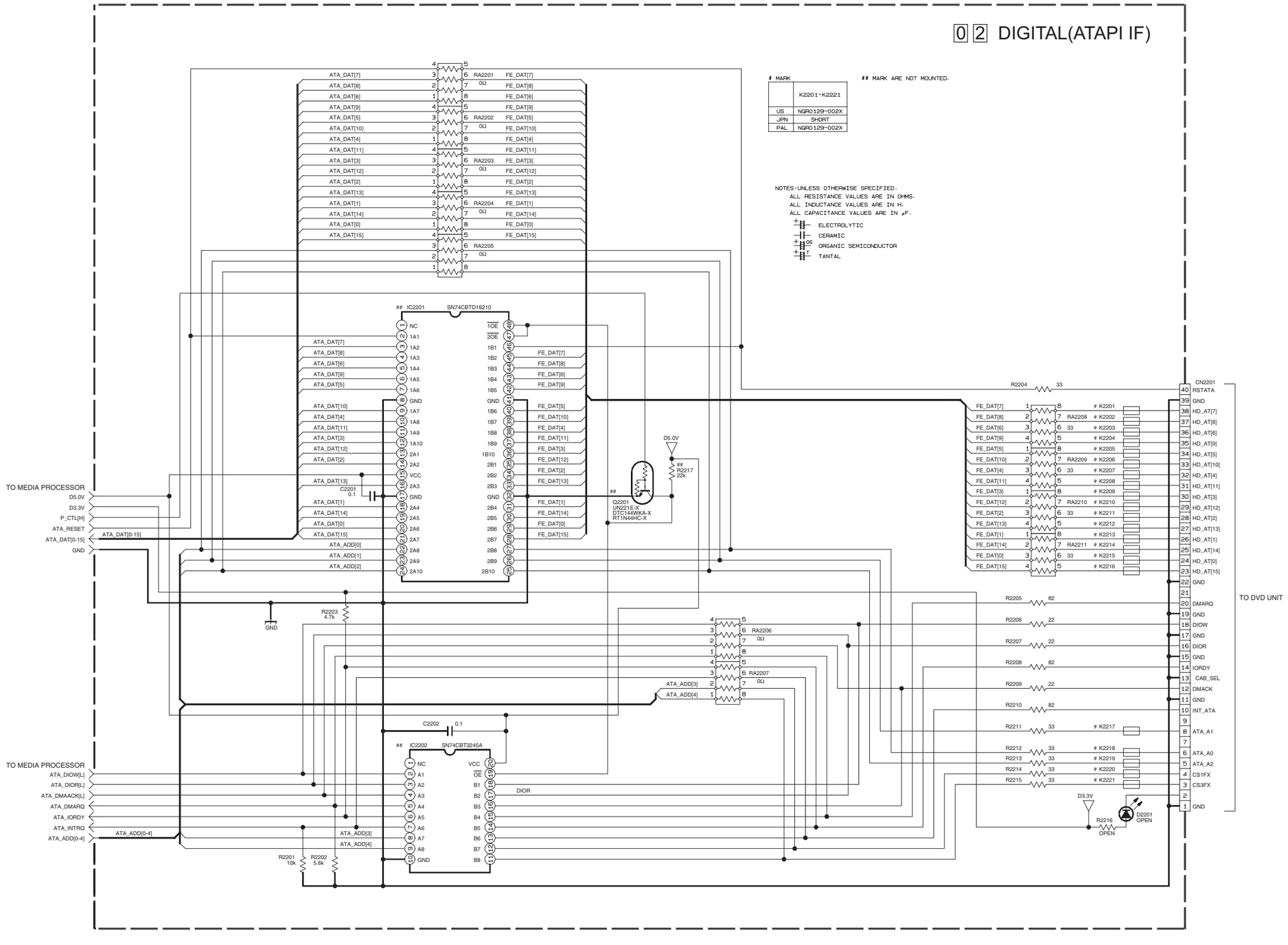
02 DIGITAL(1394PHY)



p30122001a_rev1

SHEET 6

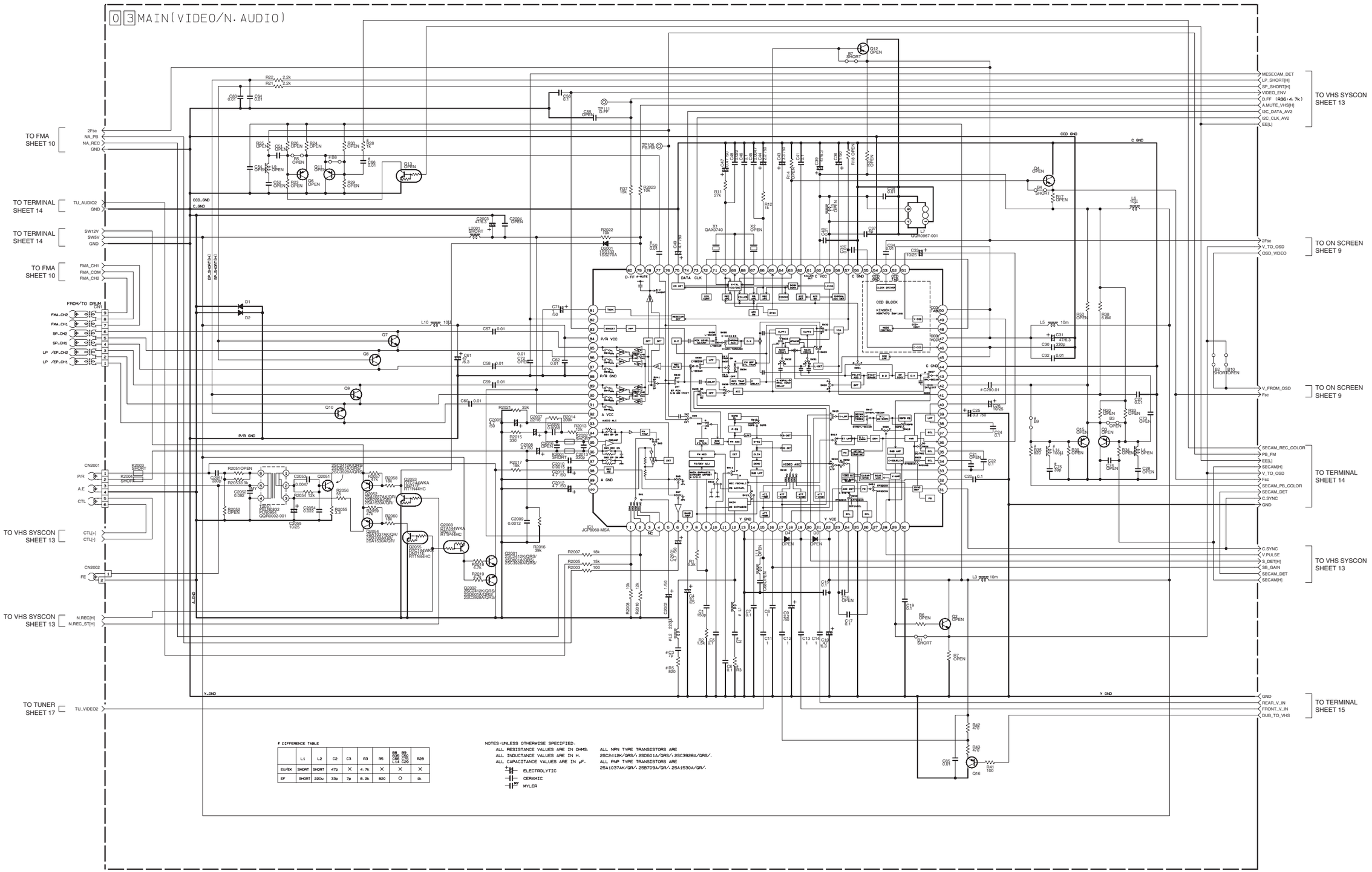
■ DIGITAL(ATAPI IF) SCHEMATIC DIAGRAM



p20403001a_rev1

SHEET 7

■ MAIN(VIDEO/N.AUDIO) SCHEMATIC DIAGRAM

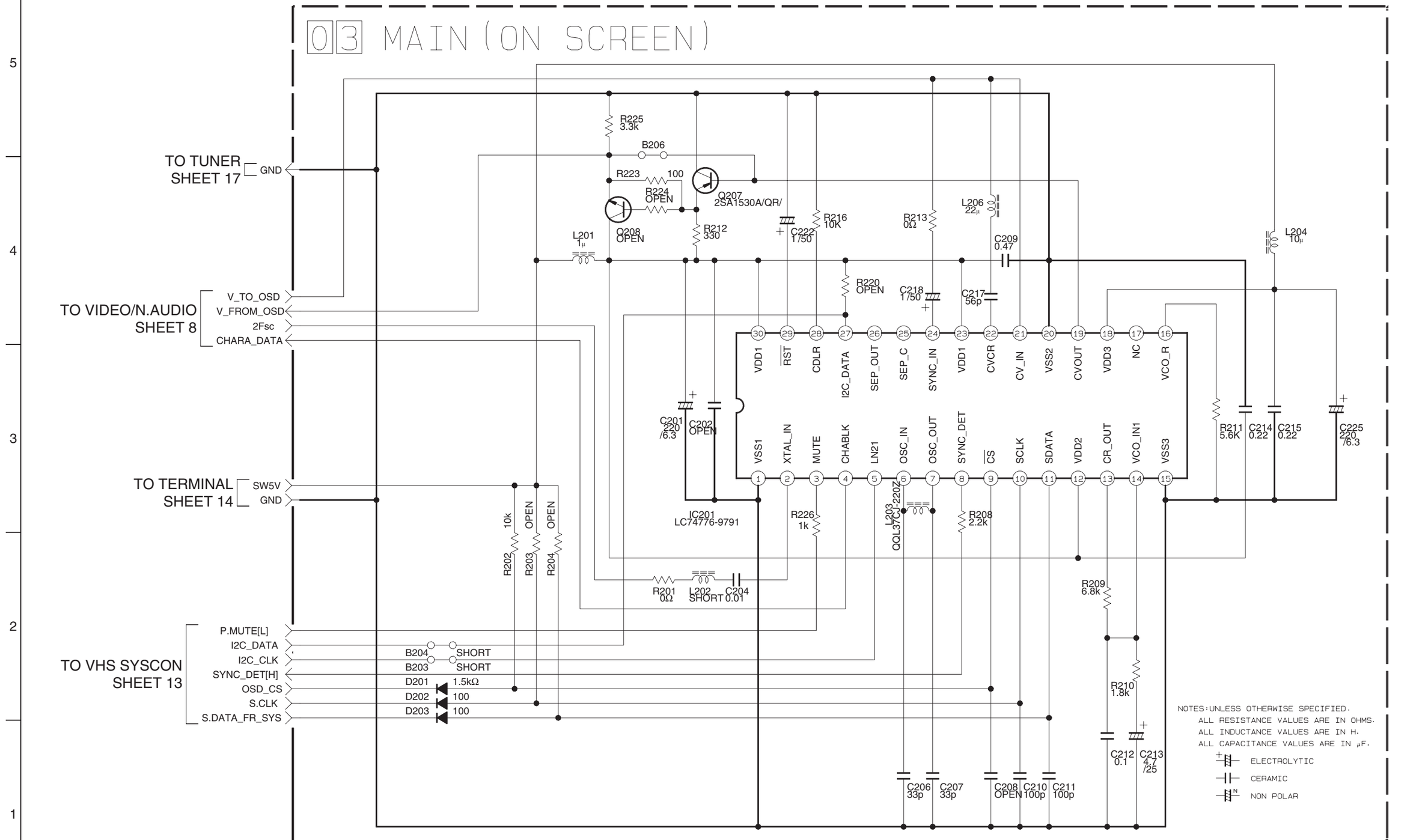


	L1	L2	C2	C3	R3	R5	R8 R9 R26 R27 C56 C58 L14 C59	R28
EU/EK	SHORT	SHORT	47p	X	4.7k	X	X	X
EF	SHORT	220u	33p	7p	8.2k	820	O	1k

p10629001a_rev0

SHEET 8

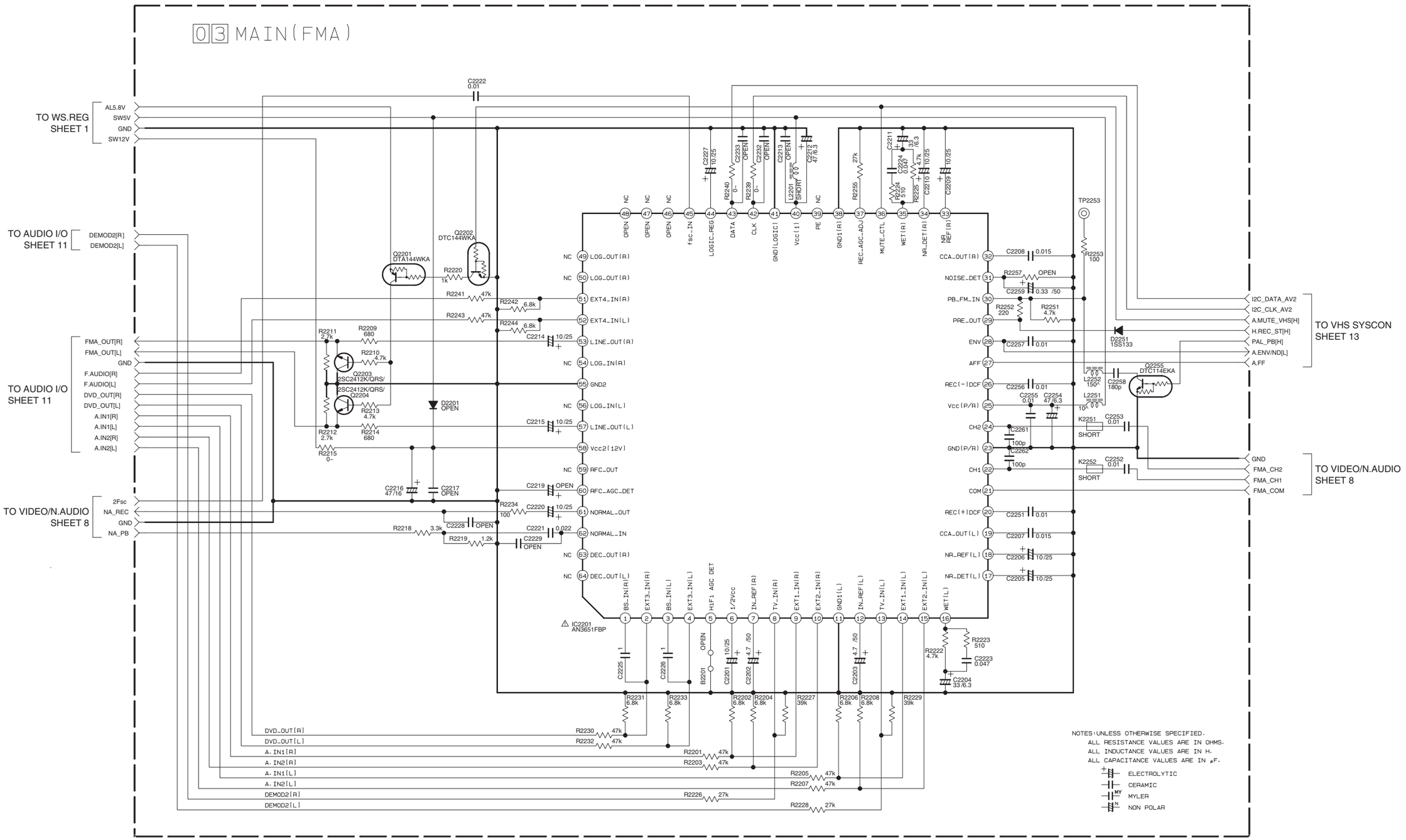
■ MAIN(ON SCREEN) SCHEMATIC DIAGRAM



p30111001a_rev0

SHEET 9

■ MAIN(FMA) SCHEMATIC DIAGRAM

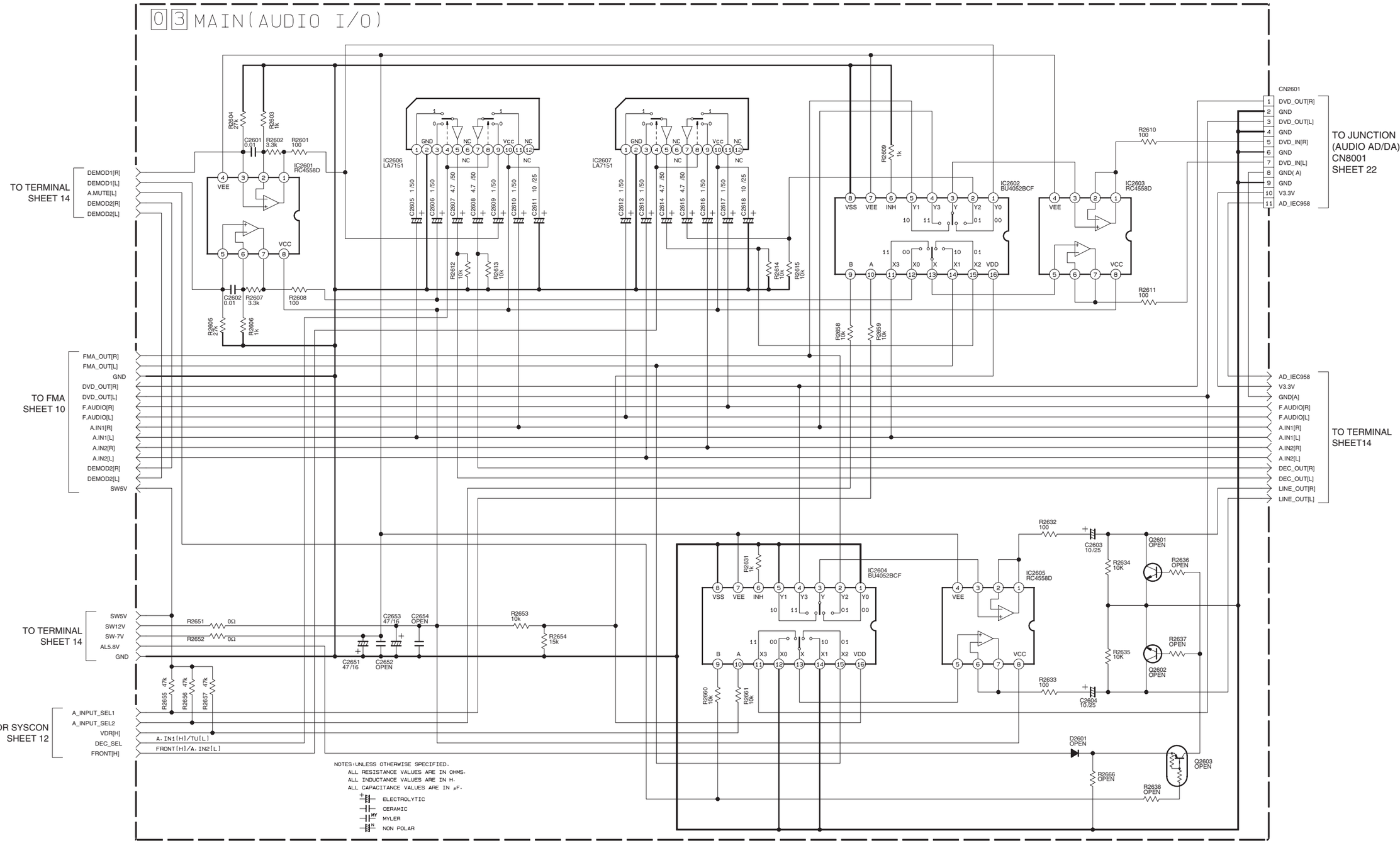


p20422001a_rev0

SHEET 10

2-23 2-24

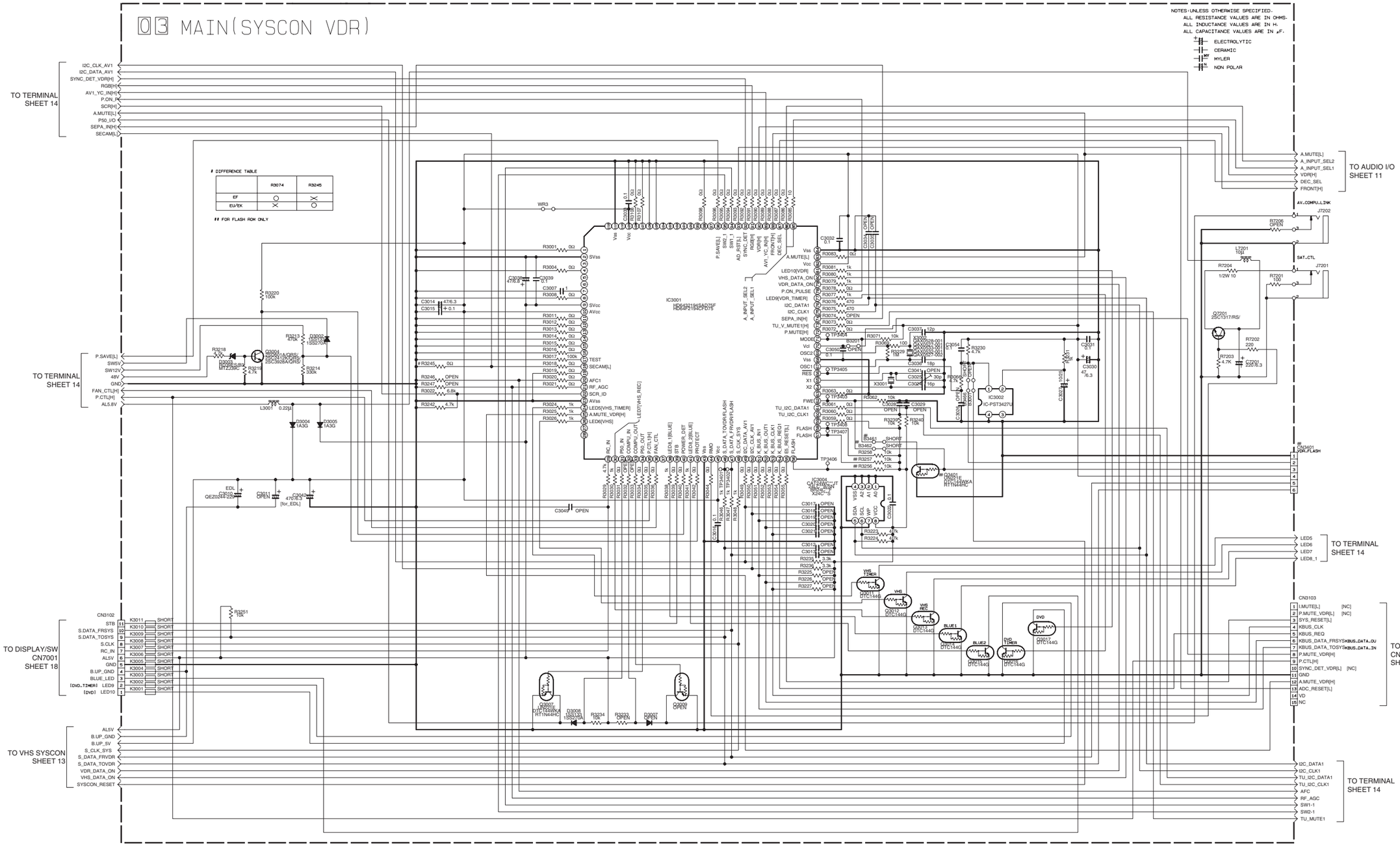
■ MAIN(AUDIO I/O) SCHEMATIC DIAGRAM



p20423001a_rev0

SHEET 11

■ MAIN(VDR SYSCON) SCHEMATIC DIAGRAM

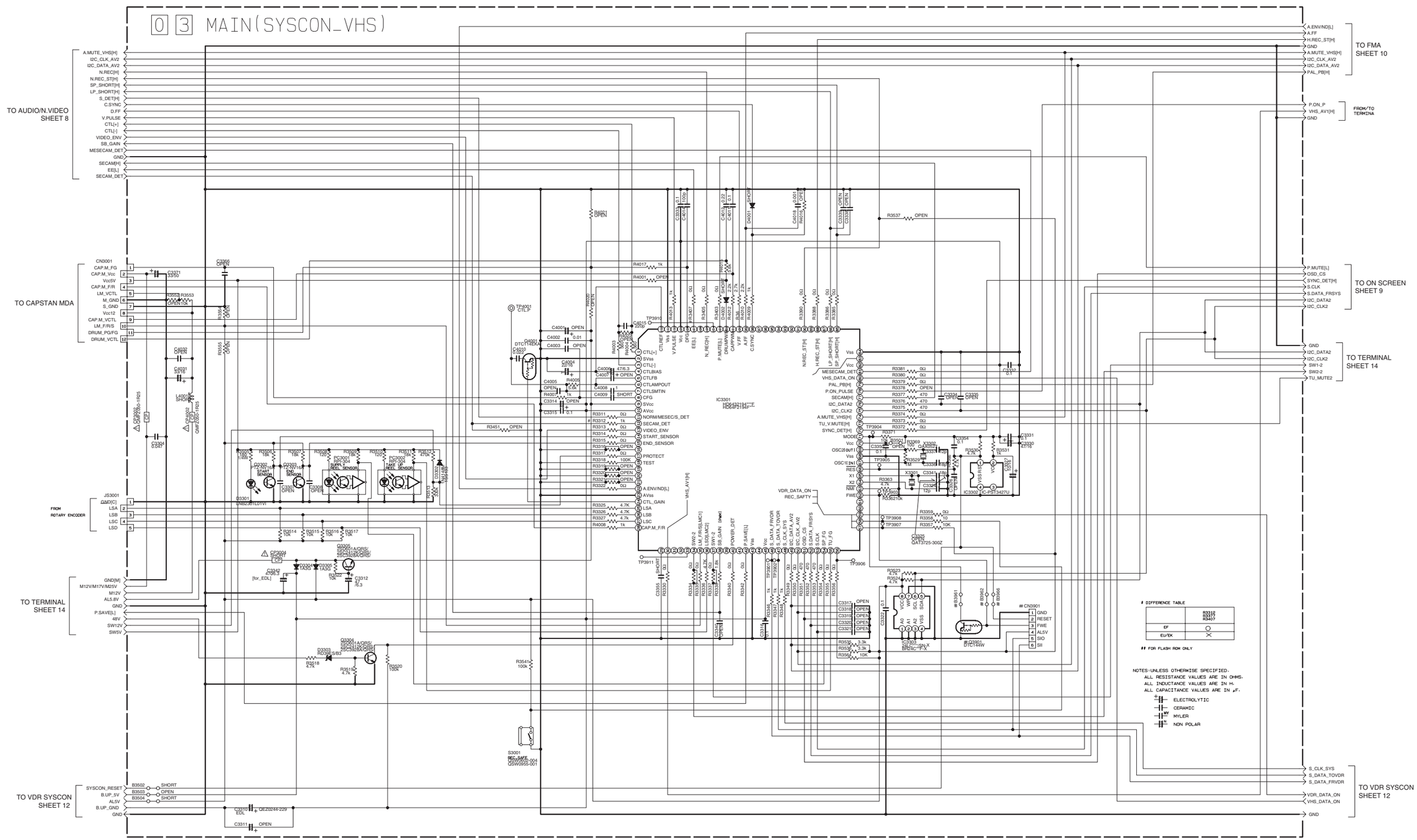


p10625001a_rev0

SHEET 12

2-27 2-28

■ MAIN(VHS SYSCON) SCHEMATIC DIAGRAM



p10624001a_rev0

SHEET 13

■ MAIN(TERMINAL) SCHEMATIC DIAGRAM

TO AUDIO IO SHEET 11

TO TERMINAL CN914 SHEET 14

TO TERMIMAL CN913 SHEET 14

TO TERMINAL CN915 SHEET 14

TO JUNCTION (VIDEO) CN7107 SHEET 21

TO VIDEO/N.AUDIO) SHEET 8

TO VIDEO SW CN502 SHEET 19

TO ON SCREEN SHEET 9

TO TUNER CN6001 SHEET 17

TO TUNER CN6002 SHEET 14

TO VHS SYSCON SHEET 13

TO VDR SYSCON SHEET 12

TO TUNER CN6003 SHEET 17

TO OPE/JACK CN7201 SHEET 18

TO SECAM CN301 SHEET 20

TO VDR SYSCON SHEET 12

TO SW REGULATOR CN5301 SHEET 1

TO VHS SYSCON SHEET 13

COAXIAL OUT

OPT OUT

DIFFERENCE TABLE

	CN7119
EF	○
EU/EK	×

NOTES:UNLESS OTHERWISE SPECIFIED.
ALL RESISTANCE VALUES ARE IN OHMS.
ALL INDUCTANCE VALUES ARE IN H.
ALL CAPACITANCE VALUES ARE IN μF.

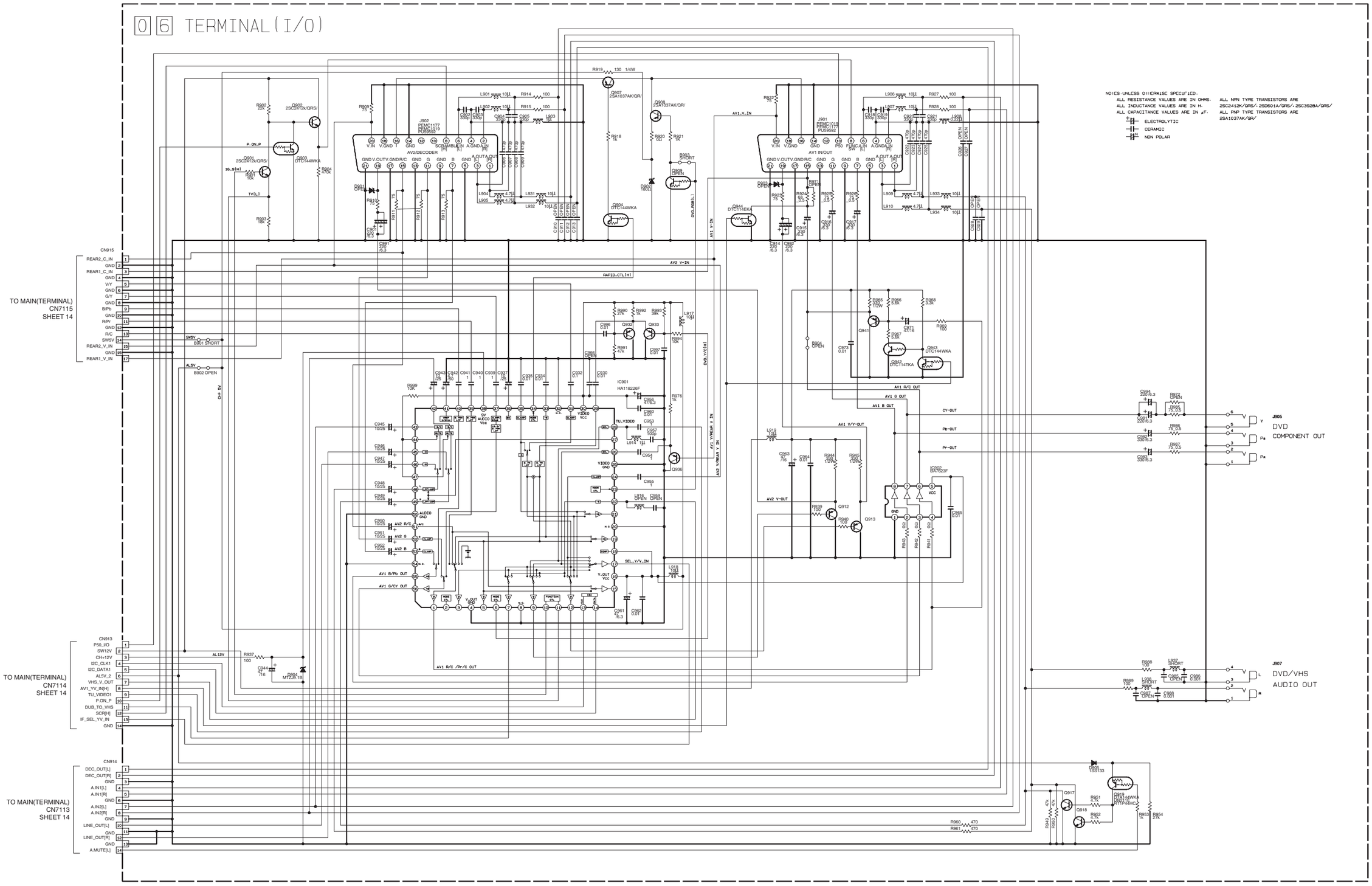
ELECTROLYTIC
CERAMIC
MYLER
NON POLAR

03 MAIN TERMINAL

p10626001a_rev0

SHEET 14

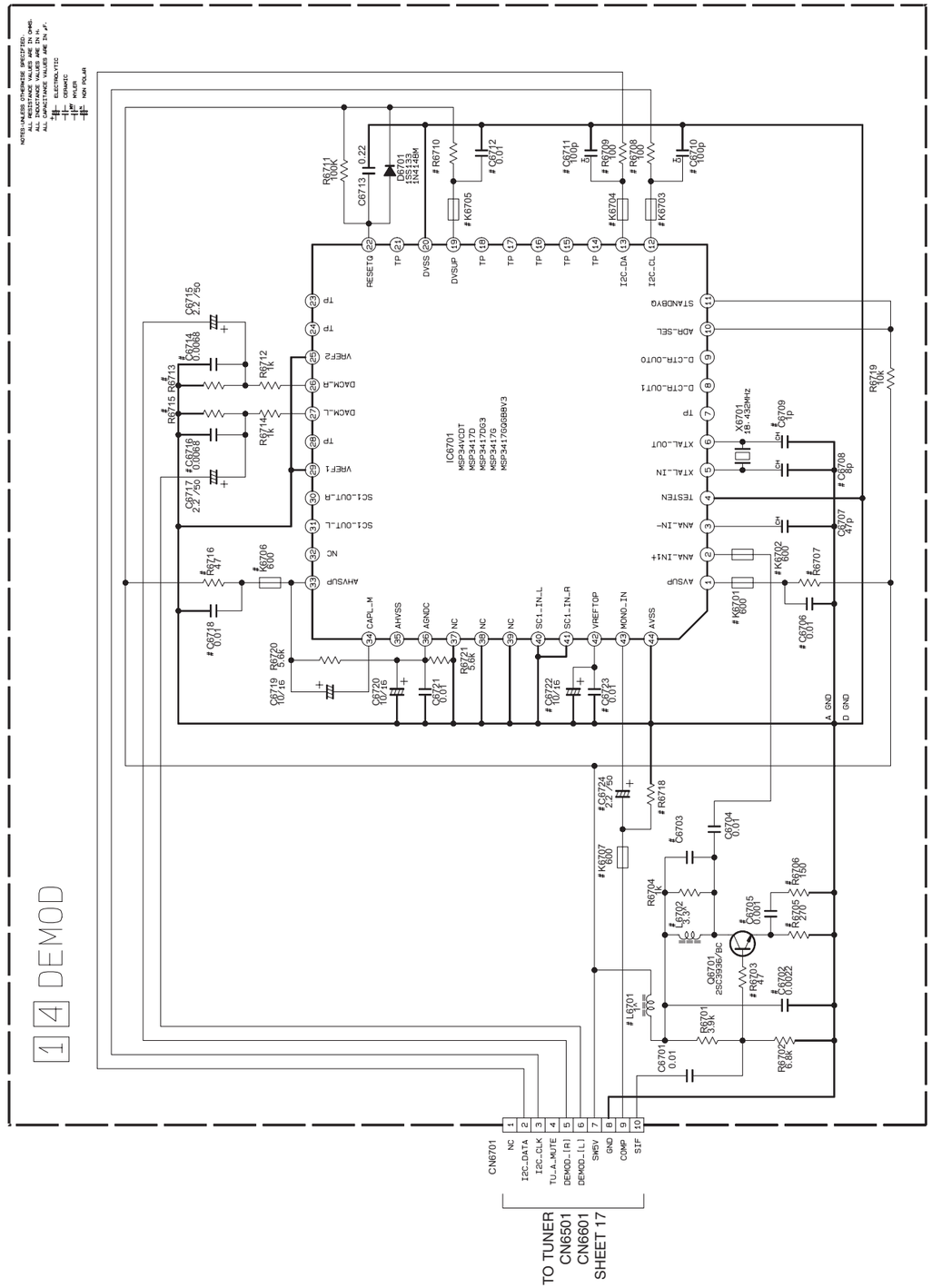
■ TERMINAL(I/O) SCHEMATIC DIAGRAM



p10628001a_rev0

SHEET 15

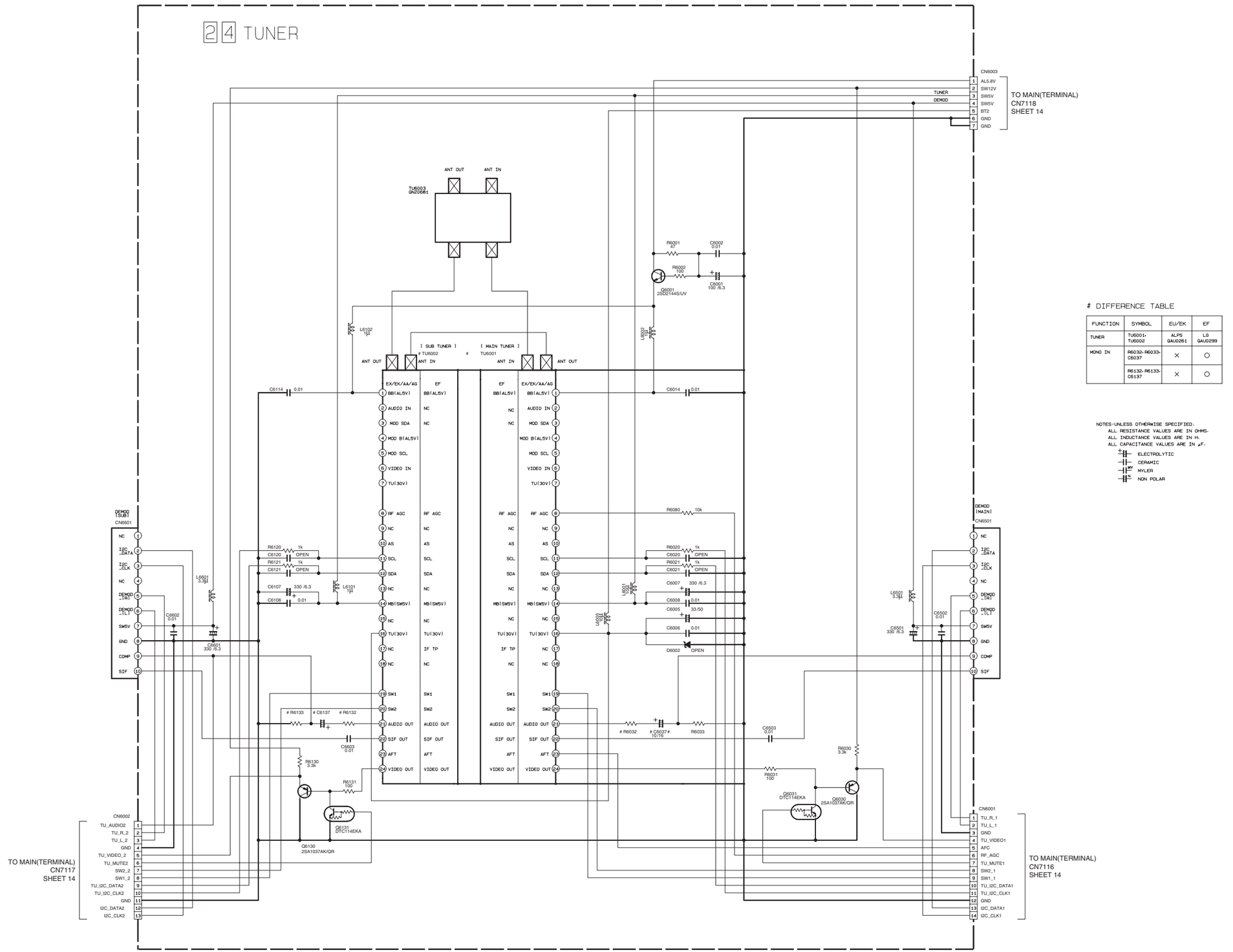
■ DEMOD SCHEMATIC DIAGRAM



DIFFERENCE TABLE

		V13			V14					V15, V16		V14DVS3		D2	
		FRANCE MS	EU/EK	ARC	EU/EK	FRANCE MS	KOREA	ARC 4SYSTEM	ARC 3SYSTEM	EU/EX/EK	MS/EF	KR	MS	EX/EK	AA/AG
DEMOD PWB ASSY		LPA10094 -01*	LPA10094 -02*	LPA10094 -03*	LPA10094 -04*	LPA10094 -05*	LPA10094 -06*	LPA10094 -07*	LPA10094 -08*	LPA10094 -09*	LPA10094 -10*	LPA10094 -11*	LPA10094 -12*	LPA10094 -13*	LPA10094 -14*
PRE AMP	R6703	47	47	47	0	0	47	0	0	0	0	47	0	0	0
	R6705	270	270	100	270	270	270	270	270	270	270	270	270	270	270
	R6706	150	150	×	×	×	100	×	×	×	×	100	×	×	×
	C6702	0.0022	0.0022	0.0022	×	×	×	×	×	×	×	×	×	×	×
	C6703	×	×	220p	×	×	×	220p	180p	×	×	×	×	×	180p
	C6705	0.001	0.001	×	×	×	0.001	×	×	×	×	0.001	×	×	×
	L6701	1μ	1μ	1μ	SHORT	SHORT	SHORT	SHORT	SHORT	SHORT	SHORT	SHORT	SHORT	SHORT	SHORT
	L6702	3.3μ	3.3μ	3.3μ	×	×	3.3μ	3.3μ	3.3μ	×	×	3.3μ	×	×	3.3μ
MONO IN	K6707	FE 600	×	×	×	FE 600	×	×	×	×	FE 600	×	FE 600	×	×
	C6724	0.22/50	×	×	×	0.22/50	×	×	×	×	0.22/50	×	0.22/50	×	×
	R6718	×	×	×	×	×	×	×	×	×	×	×	×	×	×
I2C-BUS	R6708	100	100	100	FE 600	FE 600	FE 600	FE 600	FE 600	FE 600	FE 600	FE 600	FE 600	10K	10K
	R6709	100	100	100	FE 600	FE 600	FE 600	FE 600	FE 600	FE 600	FE 600	FE 600	FE 600	1K	1K
	K6703	FE 600	FE 600	FE 600	1K	1K	1K	1K	1K	10K	0	1K	1K	FE 600	FE 600
	K6704	FE 600	FE 600	FE 600	1K	1K	1K	1K	1K	0	0	1K	1K	FE 600	FE 600
	C6710, C6711	×	×	×	×	×	×	×	×	×	×	×	×	×	×
ANALOG Vcc	R6707	22	47	47	FE 600	FE 600	FE 600	FE 600	FE 600	FE 600	FE 600	FE 600	39	0	0
	K6701	FE 600	FE 600	FE 600	33	33	33	33	33	33	33	39	FE 600	FE 600	FE 600
	C6706	×	×	×	×	×	×	×	×	×	×	×	×	×	×
DIGITAL Vcc	R6710	10	12	12	FE 600	FE 600	FE 600	FE 600	FE 600	FE 600	FE 600	FE 600	12	0	0
	K6705	FE 600	FE 600	FE 600	10	10	10	10	10	0	10	12	FE 600	FE 600	FE 600
	C6712	×	×	×	×	×	×	×	×	×	×	×	×	×	×
DAC Vcc	R6716	47	47	47	FE 600	FE 600	FE 600	FE 600	FE 600	FE 600	FE 600	FE 600	47	47	47
	K6706	FE 600	FE 600	FE 600	47	47	47	47	47	47	47	47	FE 600	FE 600	FE 600
	C6718	×	×	×	×	×	×	×	×	×	×	×	×	×	×
X'TAL	C6708	8p	8p	8p	7p	7p	7p	7p	7p	7p	7p	7p	8p	7p	7p
	C6709	1p	1p	1p	3p	3p	3p	3p	3p	3p	3p	3p	2p	3p	3p
DAC OUT	R6713, R6715	×	×	×	×	×	×	×	×	12K	12K	×	×	O	O
	C6714, C6716	0.0068	0.0068	0.0068	0.0022	0.0068	0.0022	0.0022	0.0022	0.0022	0.0068	0.0022	0.0068	0.0022	0.0022
VREF	C6722	×	×	×	×	×	×	×	×	×	×	×	×	×	×
	C6723	0.01	0.01	0.01	0.01	0.01	0.001	0.01	0.01	0.01	0.01	0.001	0.01	0.01	0.01

■ TUNER SCHEMATIC DIAGRAM



DIFFERENCE TABLE

FUNCTION	SYMBOL	EU/EK	EF
TUNER	TU6001・TU6002	ALPS GAU0261	LG GAU0299
MONO IN	R6032・R6033・C6037	×	○
	R6132・R6133・C6137	×	○

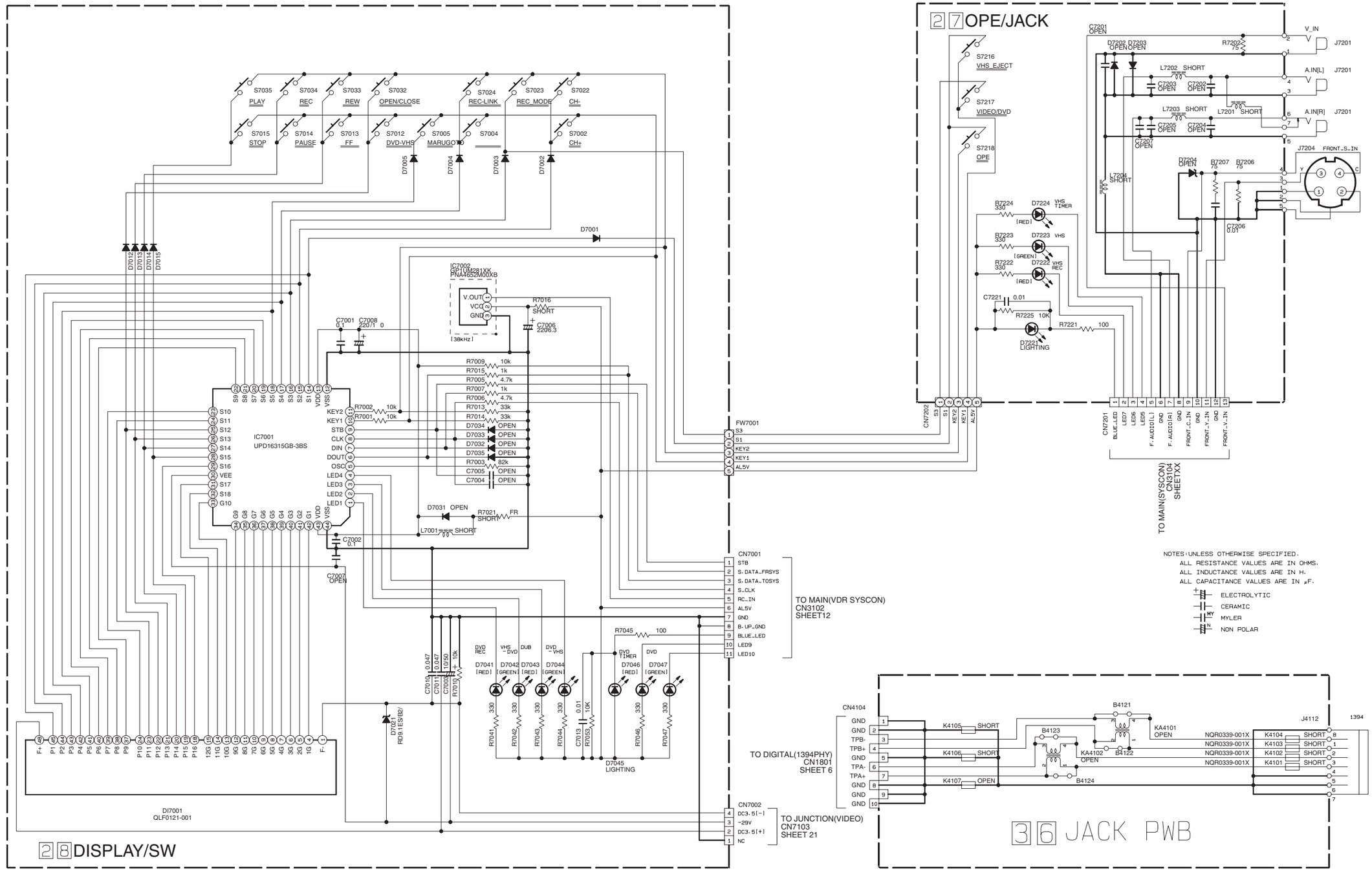
NOTES:UNLESS OTHERWISE SPECIFIED.
ALL RESISTANCE VALUES ARE IN OHMS.
ALL INDUCTANCE VALUES ARE IN H.
ALL CAPACITANCE VALUES ARE IN µF.

ELECTROLYTIC
CERAMIC
MYLER
NON POLAR

p10627001a_rev0

SHEET 17

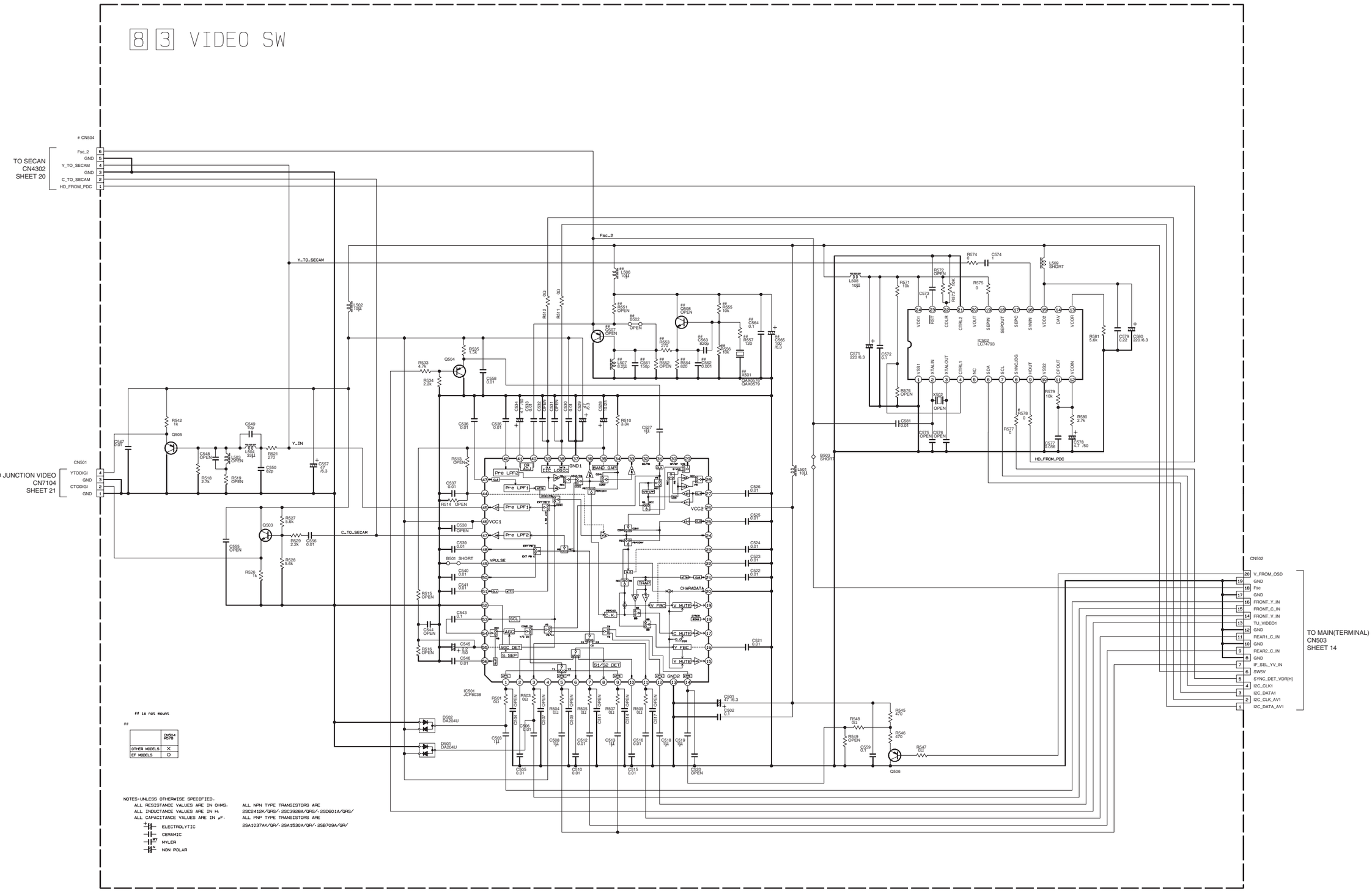
■ OPERATION JACK, SWITCH DISPLAY AND JACK SCHEMATIC DIAGRAM



p10565001a_rev0

SHEET 18

■ VIDEO SW SCHEMATIC DIAGRAM



p10622001a_rev0

SHEET 19

2-41 2-42

■ SECAM SCHEMATIC DIAGRAM [DR-MV1SEF ONLY]

88 SECAM

B301 OPEN
Q312 OPEN
Q311 OPEN
R301 27k
R321 OPEN 1k
R302 120k
C305 0.01
C323 47/6.3
R305 47k
Q301 2SA1037AK/QR/ 2SB709A/QR/ 2SA1530A/QR/
L301 10µ
C301 150p
C302 2.2 /50
C303 0.0068
C304 0.0068
R304 6.8k
C308 0.01
R303 27k
L302 6.8µ
C307 150p
R306 27k
C309 0.1
C311 0.01
R308 2.2k
R307 2.2k
C310 0.01

IC301 LA7358
VCC
SECAM DET
PHASE DET
4.3MHZ OSC
SYNC GATE GEN./V-SEP
TO MUTE
FROM LIM
FO ADJ.
AFC
LOGIC
4.43MHZ VCO
LIMITER HOLD
FILT. ADJ
1.1MHZ OSC
MODE CTL
TO REC MUTE
TO PB MUTE
BGP GEN
DET SENSE CONTROL
GND
IREF
R/P
PB MUTE
4.3MHZ BPF
SYNC GATE
LIM
X2
2.2M BPF
4.3M BPF
1.1M BPF
1/4
TO PHASE DET
REG 4.2V
AGC AMP
AGC DET

Q302 DTA144WUA UN211E RT1P44HC
R316 120k
R315 560k
R314 24k 0.5%
R327 OPEN 1k
1k R326 OPEN
C322 0.47
R328 OPEN 1k
R312 2.7k
C321 300p 2%
C320 0.01
R313 22k
C319 1 /50
C318 0.022
R329 0
C317 680p
L303 27µ
R311 4.7k
C316 0.01
R310 22k
C315 1 /50
C314 470p
C313 0.47 /50
OPEN
R309 0Ω
C312 0.001

NOTES:UNLESS OTHERWISE SPECIFIED.
ALL RESISTANCE VALUES ARE IN OHMS.
ALL INDUCTANCE VALUES ARE IN H.
ALL CAPACITANCE VALUES ARE IN µF.
ELECTROLYTIC
CERAMIC
MY MYLER
N NON POLAR

B311 OPEN

L4301 10µ
Q4301
Q4302
Q4303
C4302 47 /25
C4301 0.01
R4302 0Ω
R4301 560
R4303 OPEN
L4302 OPEN
C4304 0.01
C4303 OPEN
R4304 22k
R4305 5.6k
R4306 1.2k
R4307 10k
R4320 0Ω
C4305 0.01
R4308 22k

IC4301 LA7357M
C4306 0.01
C4307 0.01
C_IN
HPF_MON.
FILT
GND
DET.OUT
APF.MONI
FSC_IN
VCC
DET.ADJ
SYNC+BGP.IN
R4312 0Ω
C4311 OPEN
C4308 0.01
C4309 0.01
R4309 2.2k
R4310 8.2k

C4318 0.1
R4319 12k
IC4304 74HC4538D
GND VCC
C/R1 GND
RE1 C/R2
A1 RE2
B1 A2
Q1 B2
Q1 Q2
GND Q2
C4319 470p
R4311 12k
C4310 470p
R4317 22k
R4318 10k
D4301 1SS133

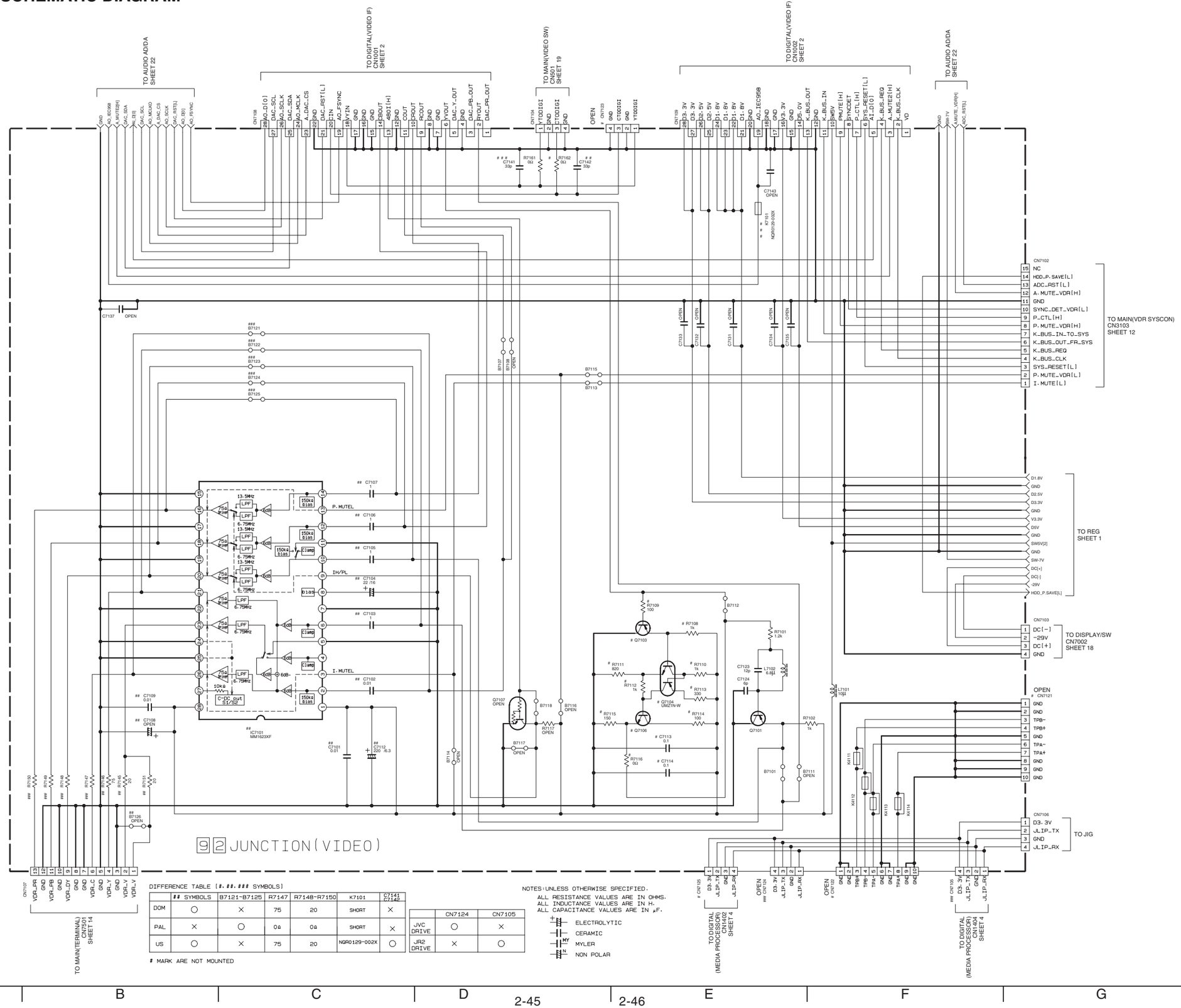
CN301
1 SEPA_IN[H]
2 SECAM[L]
3 SECAM_DET
4 C.SYNC
5 EE[L]
6 SECAM_PB_COLOR
7 SW5V
8 V_TO_OSD
9 GND
10 SECAM_REC_COLOR
11 GND
12 PB_FM
13 GND
14 Fsc
15 SECAM[H]
TO MAIN(TERMINAL) CN7119 SHEET14

CN430
1 Fsc_2
2 GND
3 Y_TO_SECAM
4 GND
5 C_TO_SECAM
6 HD_FROM_PDC
TO VIDEO SW CN504 SHEET 19

p30125001a_rev0

SHEET 20

■ VIDEO(JUNCTION) SCHEMATIC DIAGRAM



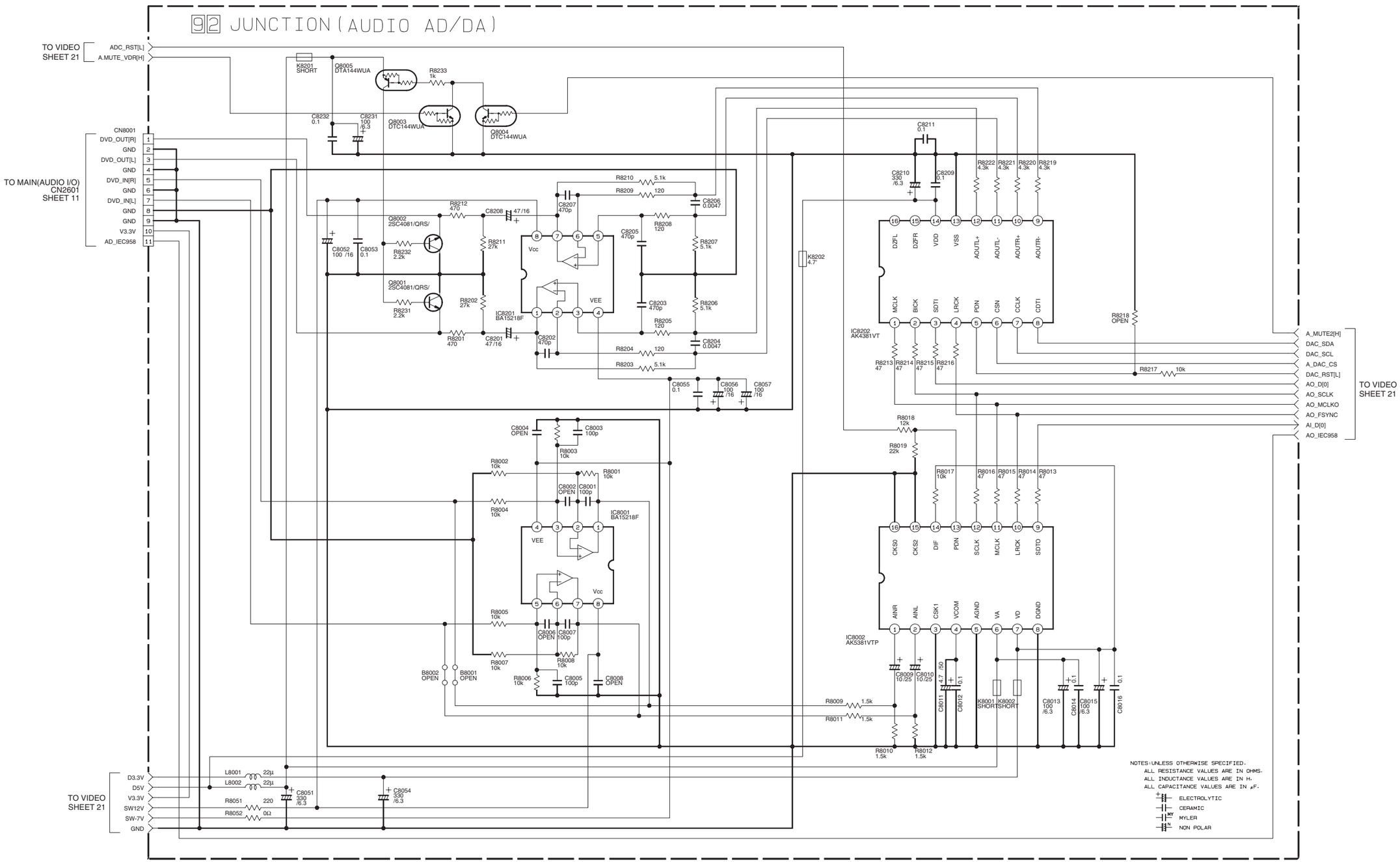
	## SYMBOLS	B7121-B7125	R7147	R7148-R7150	K7101	C7141 C7142
DOM	○	×	75	20	SHORT	×
PAL	×	○	0Ω	0Ω	SHORT	×
US	○	×	75	20	NQR0129-002X	○

	CN7124	CN7105
JVC DRIVE	○	×
JR2 DRIVE	×	○

p20420001a_rev0

SHEET 21

■ JUNCTION(AUDIO AD/DA) SCHEMATIC DIAGRAM

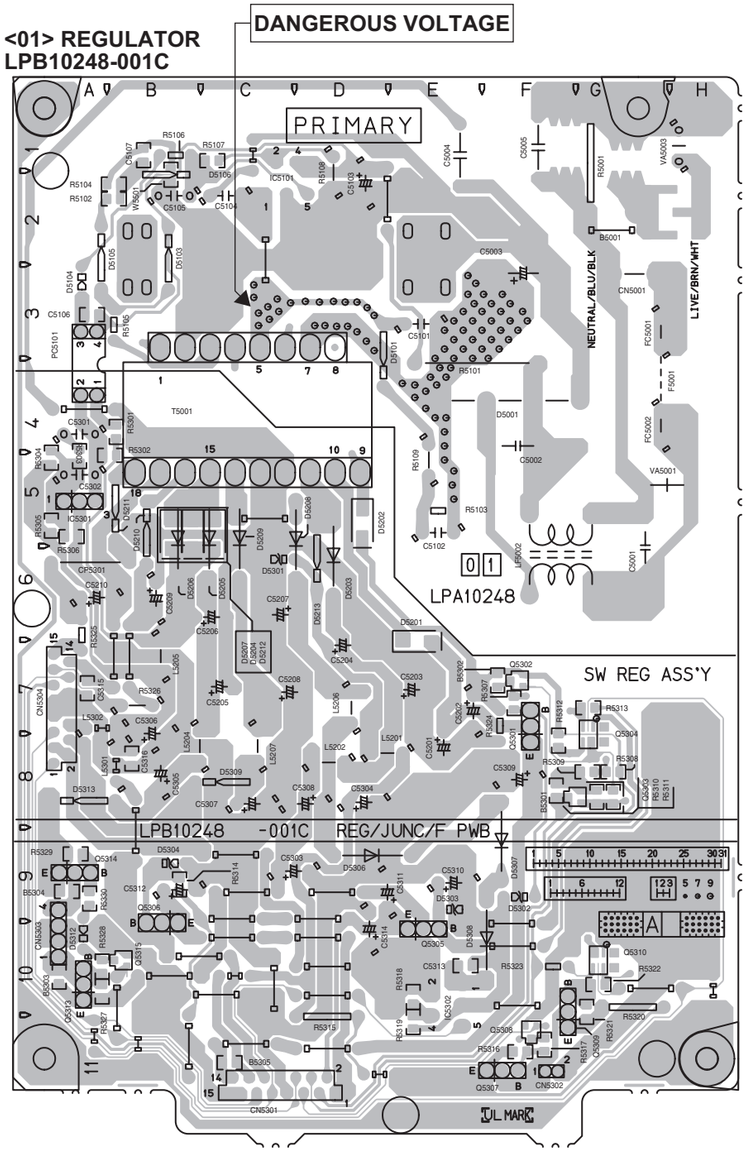


p20421001a_rev0

SHEET 22

■ REGULATOR CIRCUIT BOARD

<01> REGULATOR
LPB10248-001C

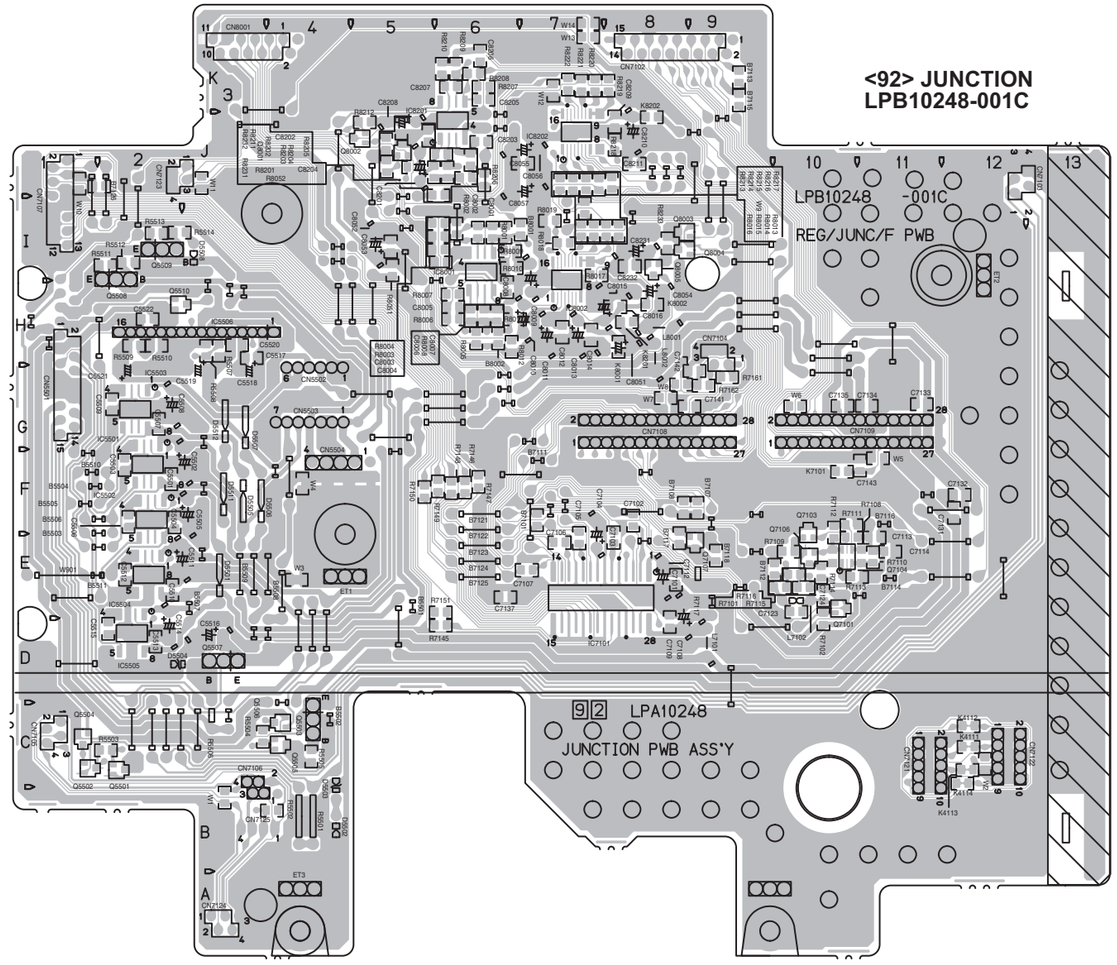


COMPONENT PARTS LOCATION GUIDE <REGULATOR> LPB10248-001C

REF.NO.	LOCATION	REF.NO.	LOCATION	REF.NO.	LOCATION	REF.NO.	LOCATION	REF.NO.	LOCATION	REF.NO.	LOCATION	REF.NO.	LOCATION	REF.NO.	LOCATION
CAPACITOR		C5301	A D 4A	C5508	A D 5J	CN5502	A D 5L	D5212	B C 5C	**COIL**		Q5315	B C 10B	R5311	B C 8G	FC5001	A D 3G
C5001	A D 5G	C5302	A D 5A	C5509	B C 5J	CN5503	A D 5L	D5213	A D 5D	L5201	A D 8D			R5312	B C 8F	FC5002	A D 4G
C5002	A D 4F	C5303	A D 9C	C5510	B C 7J	CN5504	A D 6L	D5301	A D 6C	L5202	A D 8D	**RESISTOR**		R5313	B C 7G	FW7001	A D 16U
C5003	A D 3F	C5304	A D 8D	C5511	A D 7J	CP5301	A D 6B	D5302	A D 9F	L5204	A D 8C	R5001	A D 1G	R5314	B C 9B	LF5002	A D 5F
C5004	A D 1E	C5305	A D 8B	C5512	B C 7J			D5303	A D 9E	L5205	A D 7B	R5101	A D 4E	R5315	A D 11D	PC5101	A D 4A
C5005	A D 1F	C5306	A D 8B	C5513	B C 8J	**DIODE**		D5304	A D 9B	L5206	A D 7D	R5102	B C 2B	R5316	B C 11F	SG5001	B C 2H
C5101	A D 3E	C5307	A D 8C	C5514	A D 8J	D5001	A D 4E	D5306	A D 9D	L5207	A D 8C	R5103	A D 7A	R5317	B C 11F	T5001	A D 3B
C5102	A D 5E	C5308	A D 8D	C5515	B C 8I	D5101	A D 3D	D5307	A D 8F	L5301	A D 8B	R5104	B C 2B	R5318	B C 10E	VA5001	A D 5H
C5103	A D 1D	C5309	A D 8F	C5516	A D 8K	D5103	A D 3B	D5308	A D 9F	L5302	A D 7A	R5105	A D 3B	R5319	B C 11E	VA5003	A D 1H
C5104	A D 2C	C5310	A D 9E	C5517	B C 5K	D5104	A D 3A	D5309	A D 8C			R5106	A D 1B	R5320	A D 10G		
C5105	A D 2B	C5311	A D 9E	C5518	A D 5K	D5105	A D 3A	D5312	A D 9A	**TRANSISTOR**		R5107	B C 1C	R5321	B C 10G		
C5106	B C 3A	C5312	A D 9B	C5519	A D 5K	D5106	A D 2B	D5313	A D 8B	Q5301	A D 8F	R5108	A D 1D	R5322	B C 10G		
C5107	B C 1B	C5313	B C 10E	C5520	B C 5K	D5201	B C 7E			Q5302	B C 7F	R5109	A D 5E	R5323	A D 10F		
C5201	A D 7E	C5314	A D 10D	C5521	A D 5J	D5202	B C 5D	**IC**		Q5303	B C 8G	R5301	B C 4B	R5324	A D 8F		
C5202	A D 7E	C5315	B C 7A	C5522	B C 4J	D5203	A D 5D	IC5101	A D 2C	Q5304	B C 8G	R5302	B C 5B	R5325	A D 6A		
C5203	A D 7E	C5316	B C 8B			D5204	B C 5B	IC5301	A D 5A	Q5305	A D 10E	R5303	B C 5A	R5326	A D 7B		
C5204	A D 7D	C5501	B C 6J	**CONNECTOR**		D5205	A D 5C	IC5302	A D 10E	Q5306	A D 10B	R5304	B C 5A	R5327	B C 10A		
C5205	A D 7C	C5502	A D 6J	CN5001	A D 3G	D5206	A D 5B	IC5501	B C 6J	Q5307	A D 11F	R5305	B C 5A	R5328	B C 10A		
C5206	A D 6B	C5503	B C 6J	CN5301	A D 11D	D5207	B C 5B	IC5502	B C 7J	Q5308	B C 11F	R5306	B C 5A	R5329	B C 9A		
C5207	A D 6D	C5504	B C 7J	CN5302	A D 11F	D5208	A D 5D	IC5503	B C 5J	Q5309	A D 11F	R5307	B C 7F	R5330	B C 9A		
C5208	A D 7C	C5505	A D 6J	CN5303	A D 10A	D5209	A D 5C	IC5504	B C 7J	Q5310	B C 10G	R5308	B C 8G				
C5209	A D 6B	C5506	B C 7J	CN5304	A D 8A	D5210	A D 6B	IC5505	B C 8J	Q5313	A D 10A	R5309	B C 8G	**OTHER**			
C5210	A D 6A	C5507	B C 5J	CN5501	A D 6I	D5211	A D 5B	IC5506	A D 4K	Q5314	A D 9A	R5310	B C 8G	F5001	A D 4G		

■ JUNCTION CIRCUIT BOARD

<92> JUNCTION
LPB10248-001C



COMPONENT PARTS LOCATION GUIDE <JUNCTION> LPB10248-001C

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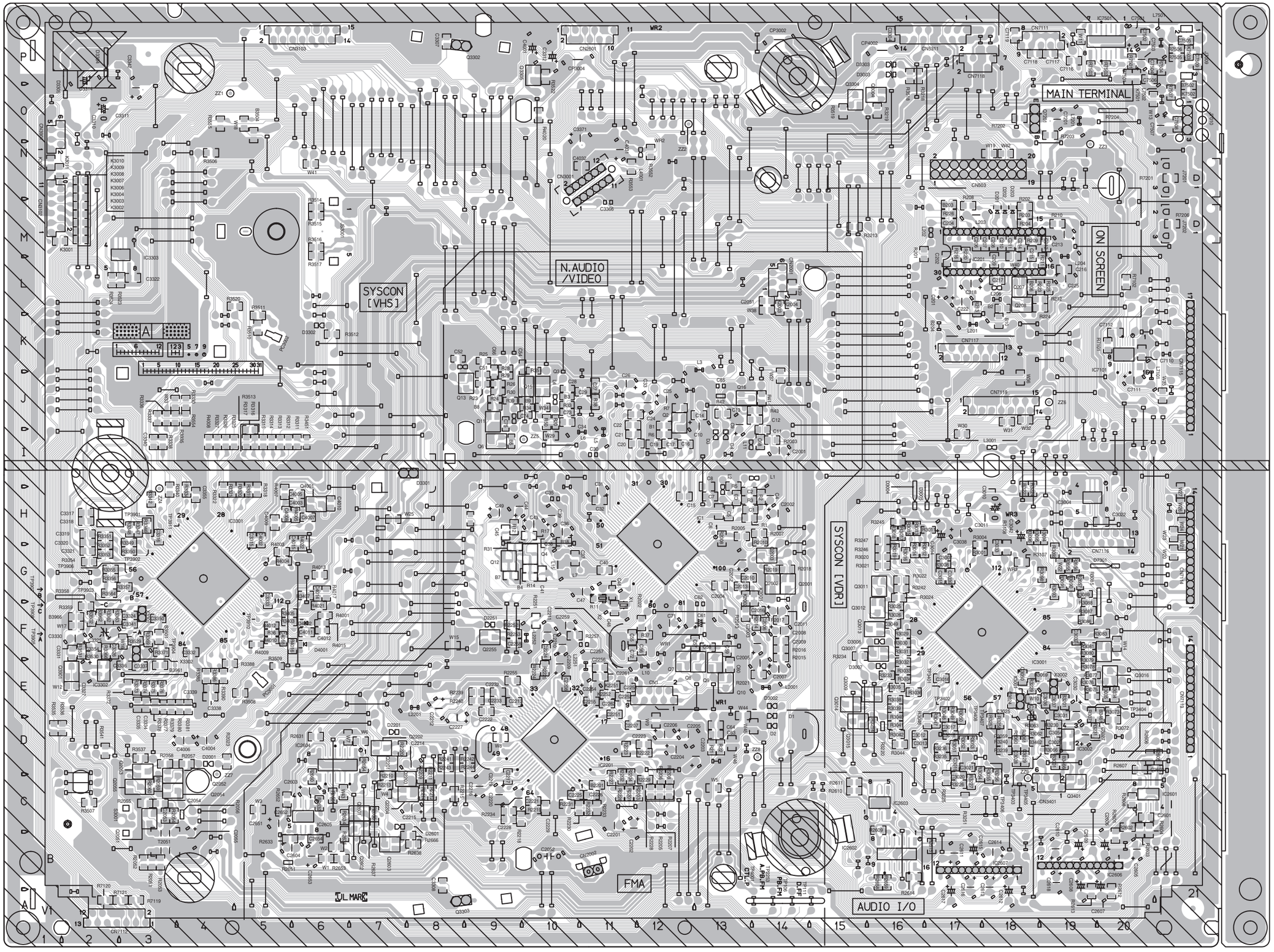
CAPACITOR		C7104	A D 7E	C8007	B C 6H	C8210	A D 8J	**DIODE**		L7101	A D 9D			R7116	B C 10E	R8016	B C 7I	R8221	B C 7K
C5501	B C 2F	C7105	B C 7E	C8008	B C 6H	C8211	B C 8J	D5501	A D 3E	L7102	A D 10E	**RESISTOR**		R7117	A D 9E	R8017	B C 7I	R8222	B C 7K
C5502	A D 3G	C7106	B C 7E	C8009	A D 7H	C8231	A D 8I	D5502	A D 4B	L8001	A D 8H	R5501	A D 4B	R7145	B C 6D	R8018	B C 7I	R8231	B C 5J
C5503	B C 2F	C7107	B C 7E	C8010	A D 7H	C8232	B C 8I	D5503	A D 4C	L8002	A D 8G	R5502	A D 4B	R7146	B C 6F	R8019	B C 7I	R8232	B C 5J
C5504	B C 2F	C7108	A D 8D	C8011	A D 7H			D5504	A D 2D			R5503	B C 2C	R7147	B C 6F	R8051	B C 5I	R8233	B C 8I
C5505	A D 3F	C7109	B C 8D	C8012	B C 7H	**CONNECTOR**		D5505	A D 3F	**TRANSISTOR**		R5504	B C 3C	R7148	B C 6F	R8052	B C 6J		
C5506	B C 2F	C7112	A D 8E	C8013	A D 7H	CN5501	A D 1G	D5506	A D 3F	Q5501	B C 2C	R5505	B C 4C	R7149	B C 6F	R8201	B C 5J	**OTHER**	
C5507	B C 2G	C7113	B C 11E	C8014	B C 7H	CN5502	A D 4G	D5507	A D 3G	Q5502	B C 1C	R5506	A D 3D	R7150	B C 5F	R8202	B C 5J	K7101	B C 10F
C5508	A D 2G	C7114	B C 11E	C8015	A D 8H	CN5503	A D 4G	D5508	A D 3I	Q5503	A D 4C	R5507	B C 3H	R7151	B C 6E	R8203	B C 6J	K8001	B C 8H
C5509	B C 2G	C7123	B C 10E	C8016	B C 8H	CN5504	A D 5F	D5511	A D 3F	Q5504	B C 1C	R5508	B C 3H	R7161	B C 9G	R8204	B C 6J	K8002	B C 8H
C5510	B C 2E	C7124	B C 10E	C8051	A D 8H	CN7102	A D 9K	D5512	A D 3G	Q5505	B C 4C	R5509	B C 2H	R7162	B C 9G	R8205	B C 6J	K8201	B C 8H
C5511	A D 3E	C7131	B C 12F	C8052	A D 5I	CN7103	A D 12J			Q5506	B C 4C	R5510	B C 2H	R8001	B C 6I	R8206	B C 6J	K8202	B C 8J
C5512	B C 2E	C7132	B C 12F	C8053	B C 5I	CN7104	A D 9H	**IC**		Q5507	A D 3D	R5511	B C 2I	R8002	B C 6I	R8207	B C 6K		
C5513	B C 2D	C7133	B C 11G	C8054	A D 8H	CN7105	A D 1C	IC5501	B C 2F	Q5508	A D 2I	R5512	B C 2I	R8003	B C 6I	R8208	B C 6K		
C5514	A D 2E	C7134	B C 11G	C8055	B C 7J	CN7106	A D 4B	IC5502	B C 2F	Q5509	A D 2I	R5513	B C 2I	R8004	B C 6I	R8209	B C 6K		
C5515	B C 2D	C7135	B C 10G	C8056	A D 7J	CN7107	A D 1J	IC5503	B C 2G	Q5510	B C 3H	R5514	B C 3I	R8005	B C 6H	R8210	B C 6K		
C5516	A D 3D	C7137	B C 6E	C8057	A D 7J	CN7108	A D 7G	IC5504	B C 2E	Q7101	B C 10E	R7101	B C 10E	R8006	B C 6H	R8211	B C 5J		
C5517	B C 3H	C7141	B C 9G	C8201	A D 5J	CN7109	A D 10G	IC5505	B C 2D	Q7103	B C 10F	R7102	B C 10D	R8007	B C 6H	R8212	B C 5J		
C5518	A D 3G	C7142	B C 9G	C8202	B C 6J	CN7121	A D 11C	IC5506	A D 4H	Q7104	B C 10E	R7108	B C 10E	R8008	B C 6H	R8213	B C 7J		
C5519	A D 3G	C7143	B C 11F	C8203	B C 6J	CN7122	A D 12C	IC7101	B C 8E	Q7106	B C 10E	R7109	B C 10E	R8009	B C 6I	R8214	B C 7J		
C5520	B C 3H	C8001	B C 6I	C8204	B C 6J	CN7123	A D 3J	IC8001	B C 6I	Q7107	B C 9E	R7110	B C 11E	R8010	B C 6I	R8215	B C 7J		
C5521	A D 2G	C8002	B C 6I	C8205	B C 6K	CN7124	A D 3A	IC8002	B C 7I	Q8001	B C 5J	R7111	B C 10F	R8011	B C 6H	R8216	B C 7J		
C5522	B C 2H	C8003	B C 6I	C8206	B C 6K	CN7125	A D 4B	IC8201	B C 6J	Q8002	B C 5J	R7112	B C 10F	R8012	B C 6H	R8217	B C 8J		
C7101	B C 8E	C8004	B C 6I	C8207	B C 6K	CN8001	A D 4K	IC8202	B C 7J	Q8003	B C 8I	R7113	B C 11E	R8013	B C 8I	R8218	B C 8J		
C7102	B C 8F	C8005	B C 6H	C8208	A D 5J					Q8004	B C 8I	R7114	B C 10E	R8014	B C 8I	R8219	B C 8K		
C7103	B C 8E	C8006	B C 6H	C8209	B C 8J			**COIL**		Q8005	B C 8I	R7115	B C 10E	R8015	B C 7I	R8220	B C 7K		

■ MAIN CIRCUIT BOARD

<03> MAIN
LPB10245-001B



COMPONENT PARTS LOCATION GUIDE <MAIN> LPB10245-001B

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CN3001	A D 11N
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CN3103	A D 5P
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CN7111	A D 19P
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Q7201	A D 18O
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R1	B C 13H
R2	B C 14H
R3	B C 13H
R5	B C 13I
R6	B C 12I
R7	B C 12J
R11	B C 11G
R12	B C 9H
R14	B C 10G
R17	B C 10H
R18	B C 10H
R20	B C 10J
R21	B C 13D
R22	B C 13D
R23	B C 9J
R24	B C 9J
R25	B C 9K
R26	B C 9J
R28	B C 9K
R29	B C 9J
R30	B C 9J
R31	B C 9G
R33	B C 10J
R34	B C 10J
R35	B C 10K
R36	B C 5F
R37	B C 12F
R38	B C 11J
R39	B C 9J
R41	B C 14J
R42	A D 13J
R43	B C 14J
R50	B C 10J
R201	B C 16M
R202	B C 18M
R203	B C 18M
R204	B C 18M
R208	B C 17M
R209	B C 18M
R210	B C 19M
R211	B C 19L
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R213	B C 17L
R216	B C 17M
R220	B C 17M
R223	B C 19L
R224	B C 19L
R225	B C 19L
R226	B C 17M
R2003	B C 14I
R2005	B C 13H
R2007	B C 14H
R2008	B C 13H
R2010	B C 14H
R2013	B C 13F
R2014	B C 14F
R2015	B C 14F
R2016	B C 14F
R2017	B C 14F
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R2022	B C 12F
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R2051	B C 3B
R2052	B C 3B
R2053	B C 3B
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R2056	A D 4C
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R2208	B C 12C
R2209	B C 8C
R2210	B C 7C
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R2212	B C 8C
R2213	B C 7C
R2214	B C 8C
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R2218	B C 9C
R2219	B C 10C
R2220	B C 7D
R2222	B C 12D
R2223	B C 11D
R2224	B C 10E
R2225	B C 10E
R2226	B C 11C
R2227	B C 11C
R2228	B C 12C
R2229	B C 12C
R2230	B C 11C
R2231	B C 10C
R2232	B C 11C
R2233	B C 11C
R2234	B C 9C
R2239	B C 9E
R2240	B C 9E
R2241	B C 8D
R2242	B C 9D
R2243	B C 8D
R2244	B C 9D
R2251	B C 10F
R2252	B C 9F
R2253	B C 9F
R2255	B C 9E
R2257	B C 10F
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R2607	B C 20D
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R2611	B C 15C
R2612	B C 20A
R2613	B C 19A
R2614	B C 16B
R2615	B C 17B
R2631	B C 6D
R2632	B C 6C
R2633	B C 5B
R2634	B C 6C
R2635	B C 6B
R2636	B C 7C
R2637	B C 7C
R2638	B C 8B
R2651	A D 5B
R2652	B C 5C
R2653	B C 6B
R2654	B C 7D
R2655	B C 19G
R2656	B C 19G
R2657	B C 19G
R2658	B C 16B
R2659	B C 16B
R2660	B C 6C
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R2666	B C 8B
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R3012	B C 17G
R3013	B C 16H
R3014	B C 16G
R3015	B C 16H
R3016	B C 16G
R3017	B C 16H
R3018	B C 16H
R3019	B C 16G
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R3022	B C 16G
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R3245	B C 16H
R3246	B C 16G
R3247	B C 16H
R3251	B C 17C
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R3257	B C 18D
R3258	B C 18D
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R3313	B C 5I
R3314	B C 5I
R3315	B C 5I
R3316	B C 5I
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R3346	B C 3H
R3347	B C 3H
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R3349	B C 3H
R3350	B C 3G
R3351	B C 2H
R3352	B C 2G
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R3356	B C 2G
R3357	B C 3G
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R3362	B C 2F
R3363	B C 2F
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R3371	B C 3F
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R3388	B C 4E
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R3405	B C 5F
R3407	B C 6G
R3451	B C 6I
R3505	A D 7H
R3506	B C 4N
R3507	B C 2C
R3509	B C 5E
R3510	B C 5K
R3511	B C 5K
R3512	B C 6K
R3513	B C 5I
R3514	B C 6M
R3516	B C 6M
R3517	B C 6M
R3518	B C 16P
R3519	B C 15O
R3520	B C 5L
R3522	B C 10P
R3523	B C 3L
R3524	B C 2L
R3529	B C 3F
R3530	B C 2F
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R3536	B C 2D
R3537	B C 3D
R3541	B C 2D
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R3553	B C 11N
R3554	B C 4J
R3555	B C 4O
R3564	B C 2G
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R4003	B C 5G
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R4005	B C 6H
R4007	B C 5H
R4008	B C 4I
R4009	B C 5F
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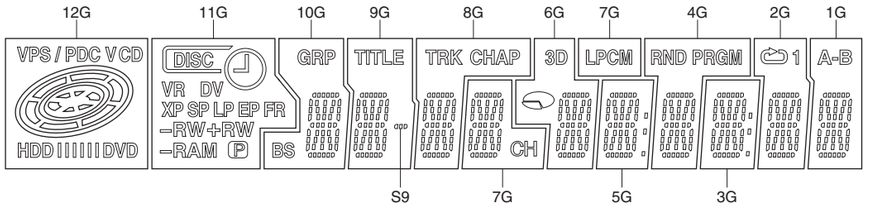
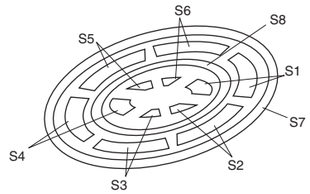
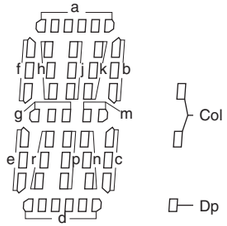
R4012	B C 5F
R4013	B C 6G
R4015	B C 6F
R4016	B C 6F
R4017	B C 6G
R4020	B C 10O
R4021	B C 6F
R4022	B C 6H
R7101	B C 20K
R7102	B C 20L
R7119	B C 3A
R7120	B C 2A
R7121	B C 3A
R7201	B C 21N
R7202	B C 18O
R7203	B C 19O
R7204	A D 20O
R7206	B C 21M
R7501	B C 20P
R7502	B C 20P
R7503	B C 19P
R7504	B C 21P
R7505	B C 21P
R7506	B C 21P
R7507	B C 21O
OTHER	
CP3002	A D 14P
CP3004	A D 10P
CP4002	A D 16P
J7009	A D 22P
J7010	A D 22O
J7201	A D 21N
J7202	A D 21M
JS3001	A D 6M
K2001	B C 14G
K2002	B C 13G
K2003	B C 14L
K2004	B C 14L
K2251	B C 11E
K2252	B C 11E
K3001	B C 1M
K3002	B C 2M
K3003	B C 2M
K3004	B C 2M
K3005	B C 1N
K3006	B C 2M
K3007	B C 2M
K3008	B C 2N
K3009	B C 2N
K3010	B C 2N
K3011	B C 1N
K7501	B C 20P
K7502	B C 21O
K7503	B C 21P
PC01288	B C 7D
PC3001	A D 5E
PC3002	A D 5K
S3001	A D 3C
T2051	A D 3B
TP106	A D 14A
TP111	A D 15A
TP2253	A D 14A
TP3401	B C 17E
TP3402	B C 17E
TP3403	B C 18D
TP3404	B C 19E
TP3405	B C 19D
TP3406	B C 18D
TP3407	B C 18E
TP3408	B C 18E
TP3901	B C 3H
TP3902	B C 3G
TP3903	B C 3F
TP3904	B C 3F
TP3905	B C 3F
TP3906	B C 3G
TP3907	B C 3G
TP3908	B C 2F
TP3910	B C 5F
TP3911	B C 4H
TP4001	A D 14A
WR1	A D 12F
WR2	A D 12N
WR3	A D 18G
X1	A D 11F
X2	A D 11G
X3001	A D 18E
X3002	A D 19E
X3301	A D 3F
X3302	A D 3F

■ FDP GRID ASSIGNMENT AND ANODE CONNECTION



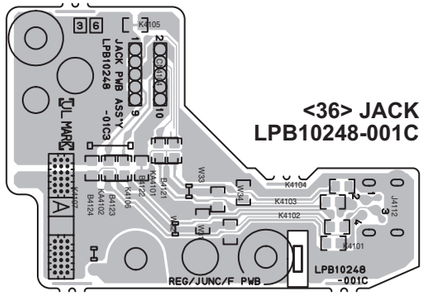




	12G	11G	10G	9G	8G	7G	6G	5G	4G	3G	2G	1G
P1	VPS/PDC	DISC	GRP	TITLE	TRK	LPCM	3D	col	RND	col		A-
P2	V(CD)		BS	S9	CHAP	CH		Dp	PRGM	Dp	1	B
P3	(V)CD	VR	a	a	a	a	a	a	a	a	a	a
P4	S1	DV	h	h	h	h	h	h	h	h	h	h
P5	S2	XP	j	j	j	j	j	j	j	j	j	j
P6	S3	SP	k	k	k	k	k	k	k	k	k	k
P7	S4	LP	b	b	b	b	b	b	b	b	b	b
P8	S5	EP	f	f	f	f	f	f	f	f	f	f
P9	S6	FR	m	m	m	m	m	m	m	m	m	m
P10	S7	-R	g	g	g	g	g	g	g	g	g	g
P11	S8	(-R)W	c	c	c	c	c	c	c	c	c	c
P12	HDD	+R	e	e	e	e	e	e	e	e	e	e
P13	B1	(+R)W	r	r	r	r	r	r	r	r	r	r
P14	B2	-RAM	p	p	p	p	p	p	p	p	p	p
P15	B3	P	n	n	n	n	n	n	n	n	n	n
P16	DVD	-	d	d	d	d	d	d	d	d	d	d

■ JACK, DEMOD, OPERATION/JACK, SWITCH/DISPLAY AND SECAM CIRCUIT BOARDS

<36> JACK
LPB10248-001C



<14> DEMOD
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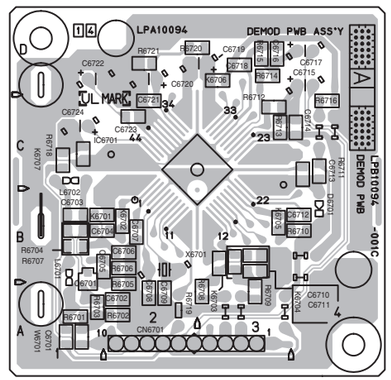

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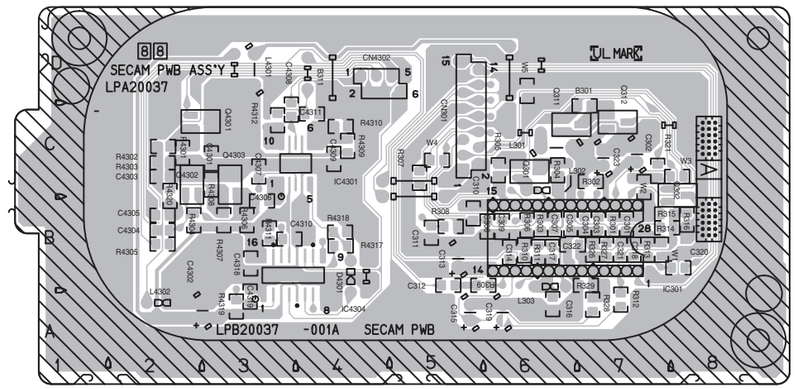

<27> OPERATION/JACK
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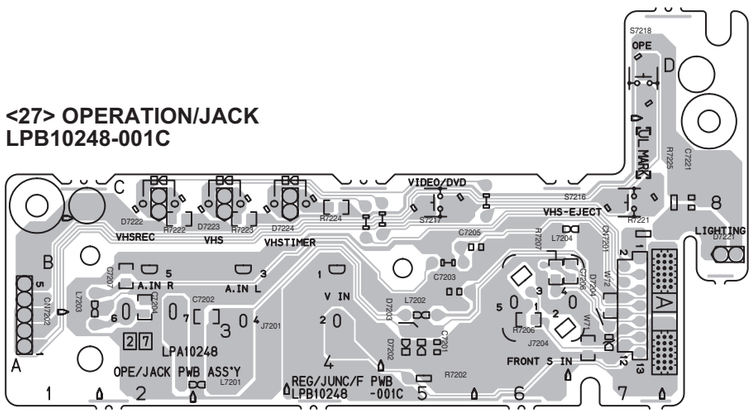


COMPONENT PARTS LOCATION GUIDE <DEMOD> LPB10094-001C

REF.NO.	LOCATION	REF.NO.	LOCATION	REF.NO.	LOCATION	REF.NO.	LOCATION	REF.NO.	LOCATION
CAPACITOR		C6714	B C 4C			R6701	B C 1A	R6714	B C 3D
C6701	B C 1A	C6715	A D 4D	**DIODE**		R6702	B C 2A	R6715	B C 3D
C6702	B C 2A	C6716	B C 3D	D6701	A D 4B	R6703	B C 1A	R6716	B C 4C
C6703	B C 1B	C6717	A D 4D			R6704	B C 1B	R6718	B C 1C
C6704	B C 1B	C6718	B C 3D	**IC**		R6705	B C 2A	R6719	A D 2A
C6705	B C 2B	C6719	A D 3D	IC6701	B C 3C	R6706	B C 2B	R6720	B C 3D
C6706	B C 2B	C6720	A D 2D			R6707	B C 1B	R6721	B C 2D
C6707	B C 2B	C6721	B C 2C	**COIL**		R6708	B C 3A		
C6708	B C 2A	C6722	A D 1D	L6701	A D 1A	R6709	B C 3A	**OTHER**	
C6709	B C 2A	C6723	B C 2C	L6702	A D 1C	R6710	B C 4B	K6701	B C 1B
C6710	B C 3B	C6724	A D 1C			R6711	B C 4C	K6702	B C 2B
C6711	B C 3B			**TRANSISTOR**		R6712	B C 3C	K6703	B C 3B
C6712	B C 4B	**CONNECTOR**		Q6701	B C 1B	R6713	B C 3C	K6704	B C 3B
C6713	B C 4C	CN6701	A D 3A					K6705	B C 3B

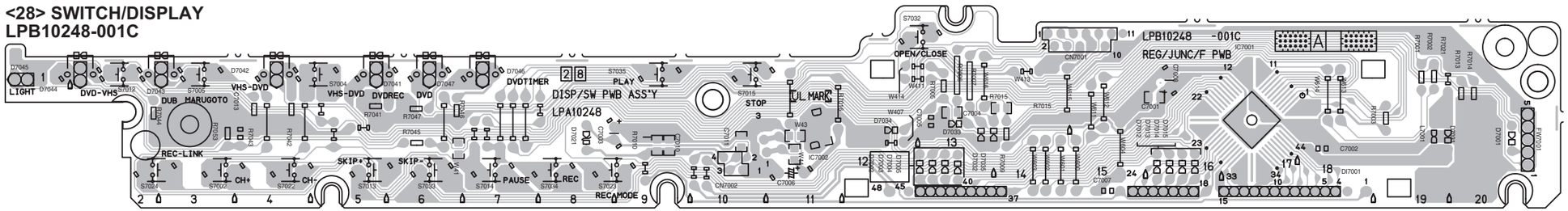
REF.NO.	LOCATION	REF.NO.	LOCATION
K6706	B C 3D		
K6707	B C 1C		
X6701	A D 2B		

COMPONENT PARTS LOCATION GUIDE <SECAM> LPB20037-001A

REF.NO.	LOCATION	REF.NO.	LOCATION	REF.NO.	LOCATION	REF.NO.	LOCATION	REF.NO.	LOCATION
CAPACITOR		C319	A D 6A			L4302	A D 2A	R307	B C 5C
C301	B C 7B	C320	B C 8B	**CONNECTOR**				R308	B C 5B
C302	A D 7C	C321	B C 7B	CN301	A D 5C	**TRANSISTOR**		R309	B C 6B
C303	B C 7B	C322	B C 6B	CN4302	A D 4D	Q301	B C 6C	R310	B C 6B
C304	B C 7B	C323	A D 7C			Q302	B C 8C	R311	B C 6B
C305	B C 6B	C4301	B C 3C	**DIODE**		Q311	B C 6C	R312	B C 7A
C307	B C 6B	C4302	A D 3A	D4301	A D 4A	Q312	B C 7C	R313	B C 7B
C308	B C 6B	C4303	B C 2C			Q4301	B C 2C	R314	B C 7B
C309	B C 6B	C4304	B C 2B	**IC**		Q4302	B C 2C	R315	B C 7B
C310	B C 5B	C4305	B C 2B	IC301	A D 7B	Q4303	B C 3C	R316	B C 8B
C311	B C 5B	C4306	B C 3B	IC4301	B C 4C			R321	B C 7C
C312	B C 5B	C4307	B C 3C	IC4304	B C 3B	**RESISTOR**		R326	B C 7B
C313	A D 5B	C4308	B C 3C			R301	B C 7B	R327	B C 7B
C314	B C 6B	C4309	B C 4C	**COIL**		R302	B C 7C	R328	B C 7A
C315	A D 5A	C4310	B C 3B	L301	A D 6C	R303	B C 6B	R329	B C 7B
C316	B C 6A	C4311	B C 4C	L302	A D 6C	R304	B C 6C	R4301	B C 2C
C317	B C 6B	C4318	B C 3B	L303	A D 6B	R305	B C 6C	R4302	B C 2C
C318	B C 7B	C4319	B C 3A	L4301	A D 3D	R306	B C 6B	R4303	B C 2C

REF.NO.	LOCATION	REF.NO.	LOCATION
R4304	B C 2B		
R4305	B C 2B		
R4306	B C 3B		
R4307	B C 3B		
R4308	B C 3C		
R4309	B C 4C		
R4310	B C 4C		
R4311	B C 3B		
R4312	B C 3C		
R4317	B C 4B		
R4318	B C 3A		
R4319	B C 2C		
R4320	B C 2C		

<28> SWITCH/DISPLAY
LPB10248-001C



COMPONENT PARTS LOCATION GUIDE <OPERATION/JACK> LPB10248-001C

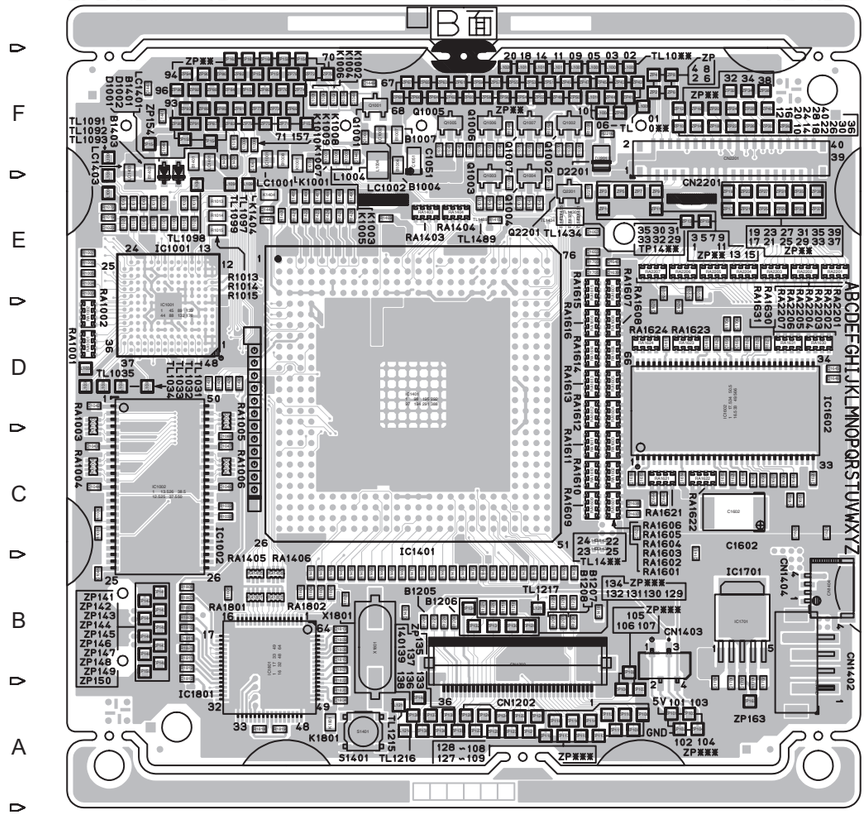
REF.NO.	LOCATION	REF.NO.	LOCATION	REF.NO.	LOCATION	REF.NO.	LOCATION	REF.NO.	LOCATION
CAPACITOR				D7221	A D 8B	L7204	A D 7B	R7224	B C 4C
C7201	A D 5A	**CONNECTOR**		D7222	A D 2C			R7225	A D 8C
C7202	B C 3A	CN7201	A D 7B	D7223	A D 3C	**RESISTOR**			
C7203	A D 5B	CN7202	A D 1A	D7224	A D 4C	R7202	A D 5A	**OTHER**	
C7204	B C 2B					R7206	B C 6A	J7201	A D 3B
C7205	A D 5B	**DIODE**		**COIL**		R7207	B C 6B	J7204	A D 6B
C7206	B C 7B	D7202	A D 5A	L7201	A D 3A	R7221	A D 7B	S7216	A D 7C
C7207	B C 2B	D7203	A D 5A	L7202	A D 5A	R7222	B C 2B	S7217	A D 5C
C7221	A D 8C	D7204	A D 7A	L7203	A D 1B	R7223	B C 3B	S7218	A D 7D

COMPONENT PARTS LOCATION GUIDE <SWITCH/DISPLAY> LPB10248-001C

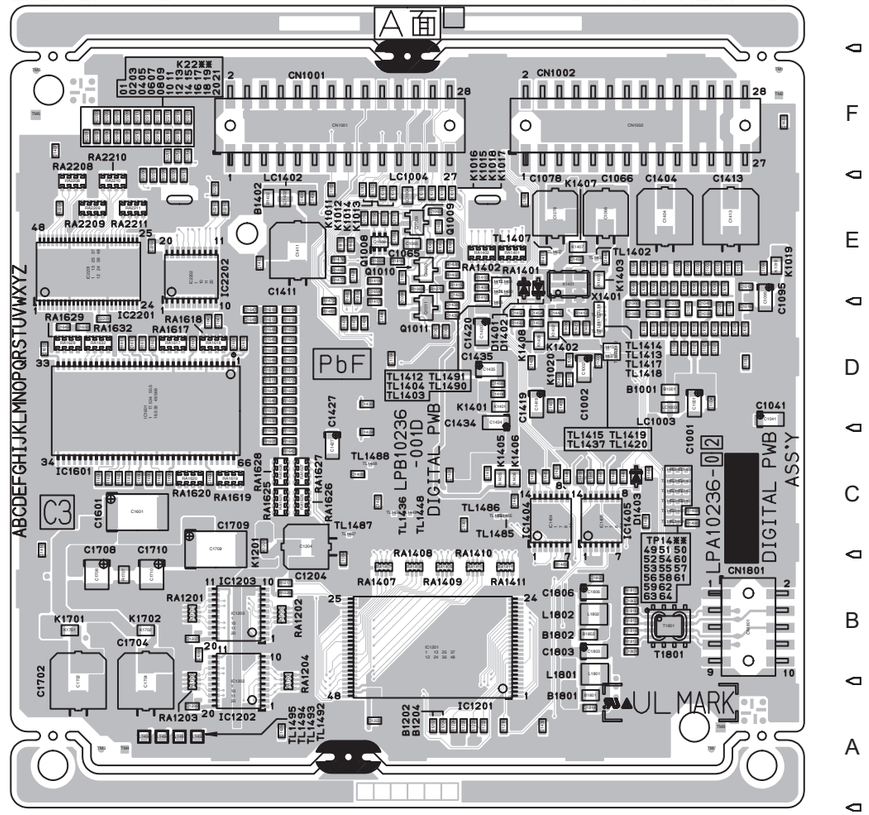
REF.NO.	LOCATION	REF.NO.	LOCATION	REF.NO.	LOCATION	REF.NO.	LOCATION	REF.NO.	LOCATION	REF.NO.	LOCATION	REF.NO.	LOCATION
CAPACITOR		**CONNECTOR**		D7015	A D 16A	D7047	A D 6B	R7005	A D 13B	R7044	A D 2B	S7013	A D 5A
C7001	B C 16B	CN7001	A D 14C	D7021	A D 8B			R7006	A D 13B	R7045	A D 6A	S7014	A D 7A
C7002	A D 18A	CN7002	A D 10A	D7031	A D 19B	**IC**		R7007	A D 13B	R7046	A D 6B	S7015	A D 10B
C7003	A D 8B			D7032	A D 13A	IC7001	B C 17B	R7009	A D 14B	R7047	A D 6B	S7022	A D 4A
C7004	B C 13B	**DIODE**		D7033	A D 13B	IC7002	A D 11B	R7010	B C 9A	R7053	A D 3A	S7023	A D 8A
C7005	A D 13B	D7001	A D 20B	D7034	A D 12B			R7013	A D 20B			S7024	A D 2A
C7006	A D 11A	D7002	A D 13A	D7035	A D 13A	**COIL**		R7014	A D 20B	**OTHER**		S7032	A D 13C
C7007	A D 15A	D7003	A D 13A	D7041	A D 5B	L7001	A D 19A	R7015	B C 14B	DI7001	A D 15B	S7033	A D 6A
C7008	A D 16B	D7004	A D 13A	D7042	A D 4B			R7016	A D 11B	FW7001	A D 21A	S7034	A D 8A
C7010	B C 9A	D7005	A D 13A	D7043	A D 3B	**RESISTOR**		R7021	A D 19B	S7002	A D 3A	S7035	A D 9B
C7011	B C 10A	D7012	A D 16A	D7044	A D 1B	R7001	A D 19B	R7041	A D 6B	S7004	A D 5B		
C7013	A D 4A	D7013	A D 16A	D7045	A D 1B	R7002	A D 19B	R7042	A D 4B	S7005	A D 3B		
		D7014	A D 16A	D7046	A D 7B	R7003	A D 19B	R7043	A D 4B	S7012	A D 2B		

■ DIGITAL CIRCUIT BOARD

<02> DIGITAL
LPB10236-001D **-FOIL SIDE-**



<02> DIGITAL
LPB10236-001D **-COMPONENT SIDE-**



COMPONENT PARTS LOCATION GUIDE <DIGITAL> LPB10236-001D

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C1004	A C 1D
C1005	A C 1E
C1006	A C 1E
C1007	A C 1E
C1008	A C 1E
C1009	A C 1E
C1010	A C 1E
C1011	A C 1E
C1012	A C 1E
C1013	A C 1E
C1014	A C 1D
C1015	A C 1E
C1016	A C 1D
C1017	B C 1E
C1018	B C 1E
C1019	B C 1E
C1020	A C 1D
C1021	A C 1D
C1022	B C 1E
C1023	B C 1E
C1024	A C 1D
C1025	A C 1D
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C1028	A C 1D
C1029	A C 1D
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C1033	A C 2D
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C1045	B C 1B
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C2201	A C 6D
C2202	A C 6E
COIL	
L1004	B C 3F
L1801	A C 2B
L1802	A C 2B
TRANSISTOR	
Q1001	B C 3F
Q1002	B C 4F
Q1003	B C 4E
Q1004	B C 4E
Q1005	B C 4F
Q1006	B C 4F
Q1007	B C 4F
Q1008	A C 4E
Q1009	A C 4E
Q1010	A C 3E
Q1011	A C 3D
Q2201	B C 4E
DIODE	
D1001	B C 1F
D1002	B C 1F
D1401	A C 3E
D1402	A C 3E
D1403	A C 2C
D2201	B C 5F
IC	
IC1001	B C 1D
IC1002	B C 1C
IC1201	A C 3B
IC1202	A C 5B
IC1203	A C 5B
IC1401	B C 3D
IC1404	A C 3C
IC1405	A C 2C
IC1601	A C 6D
IC1602	B C 6D
IC1701	B C 6B
IC1801	B C 2B
IC2201	A C 6E
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LC1402	A C 5C
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TM4	A C 6A
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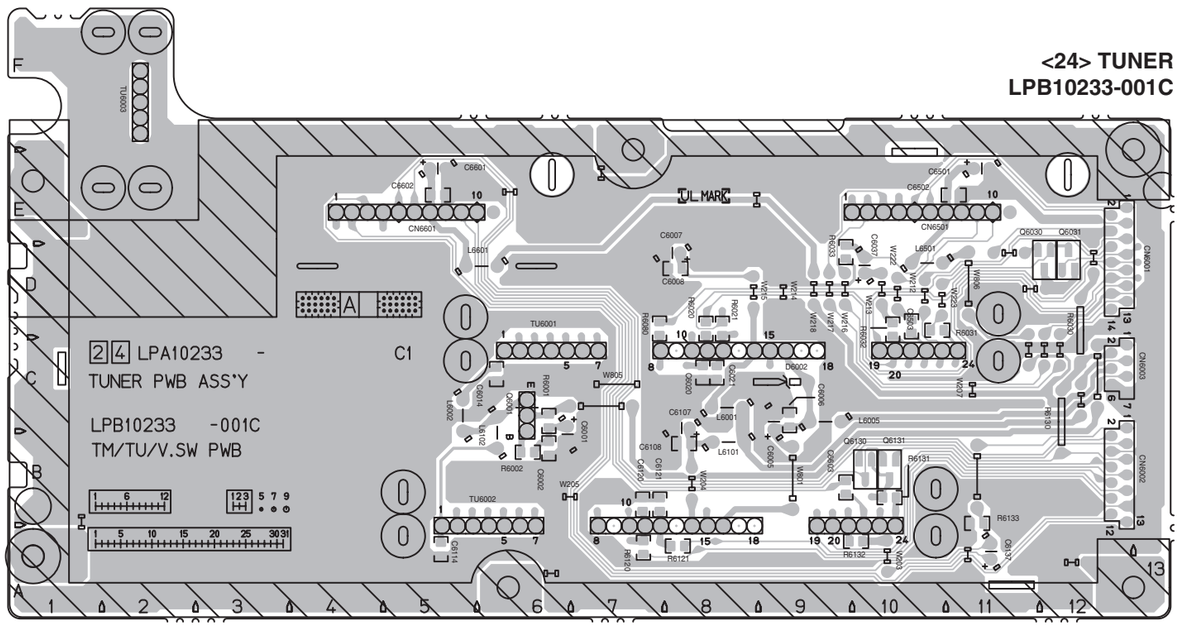
■ VIDEO SW, TUNER AND TERMINAL CIRCUIT BOARDS



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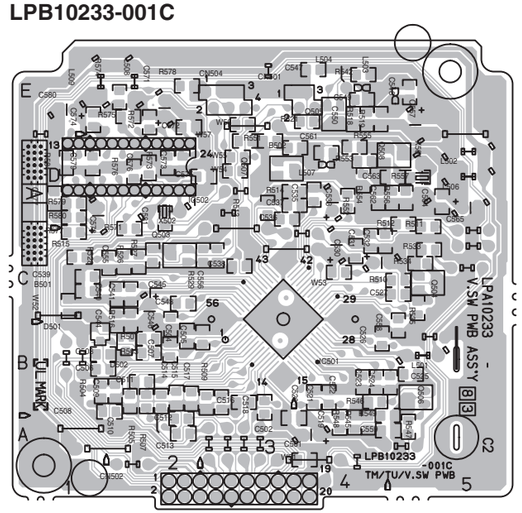
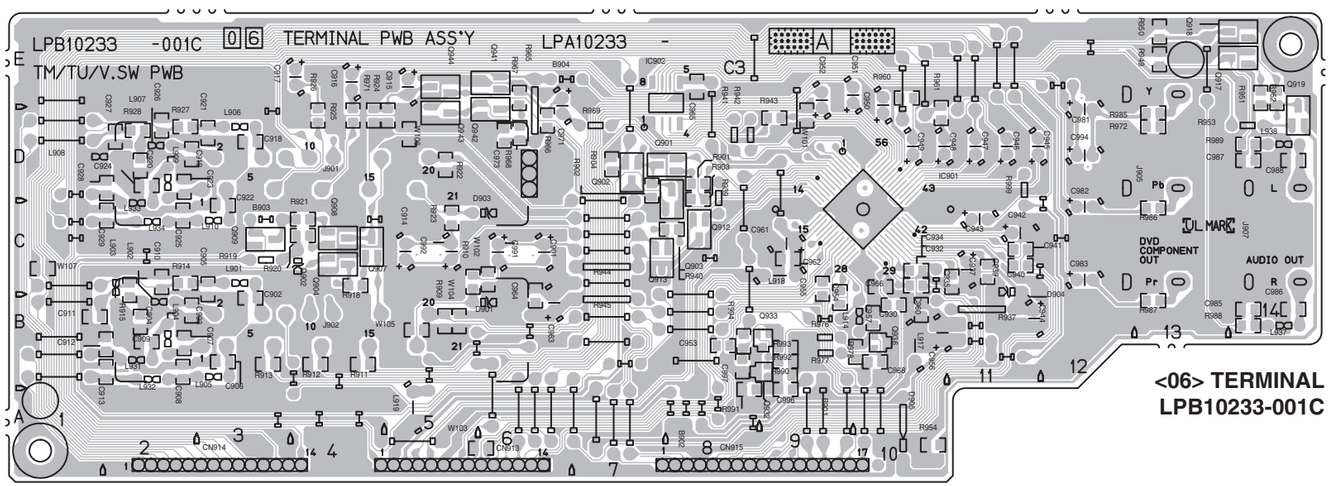
LPB10233-001C



<83> VIDEO SW
LPB10233-001C



<06> TERMINAL
LPB10233-001C

COMPONENT PARTS LOCATION GUIDE <TUNER> LPB10233-001C

REF.NO.	LOCATION
CAPACITOR	
C6001	A D 6C
C6002	B C 6B
C6005	A D 9C
C6006	B C 9C
C6007	A D 8D
C6008	B C 8D
C6014	B C 6C
C6020	B C 8C
C6021	B C 8C
C6037	A D 10D
C6107	A D 8C
C6108	B C 8B
C6114	B C 5A
C6120	B C 7B
C6121	B C 7B
C6137	A D 11A
C6501	A D 11E
C6502	B C 11E
C6503	B C 10E
C6601	A D 5E
C6602	B C 5E
C6603	B C 9B
CONNECTOR	
CN6001	A D 12E
CN6002	A D 12C
CN6003	A D 12C
CN6501	A D 10E
CN6601	A D 4E
DIODE	
D6002	A D 8C
COIL	
L6001	A D 8C
L6002	A D 5C
L6005	A D 9C
L6101	A D 8B
L6102	A D 6B
L6501	A D 10D
L6601	A D 5D
TRANSISTOR	
Q6001	A D 6C
Q6030	B C 12D
Q6031	B C 12D
Q6130	B C 10B
Q6131	B C 10B
RESISTOR	
R6001	B C 6C
R6002	B C 6B
R6020	B C 8D
R6021	B C 8D
R6030	A D 12C
R6031	B C 10D
R6032	B C 10D
R6033	B C 9D
R6080	B C 7D
R6120	B C 7A
R6121	B C 8A
R6130	A D 12C
R6131	B C 10B
R6132	B C 10A
R6133	B C 11B
OTHER	
TU6001	A D 5D
TU6002	A D 5B

COMPONENT PARTS LOCATION GUIDE <TUNER> LPB10233-001C

REF.NO.	LOCATION
CAPACITOR	
C501	A D 4A
C502	B C 4A
C503	B C 1B
C504	B C 2B
C505	B C 3B
C506	B C 1B
C507	B C 2B
C508	B C 2B
C509	B C 2B
C510	B C 2B
C511	B C 2B
C512	B C 2A
C513	B C 2A
C514	B C 2B
C515	B C 2B
C516	B C 3B
C517	B C 3B
C518	B C 3B
C519	B C 4A
C520	B C 4B
C521	B C 4B
C522	B C 4B
C523	B C 4B
C524	B C 5B
C525	B C 5B
C526	B C 4B
C527	B C 5C
C528	A D 4C
C529	A D 4C
C530	B C 4C
C531	B C 4C
C532	B C 4C
C533	B C 4D
C534	A D 4D
C535	B C 4D
C536	B C 3D
C537	B C 4D
C538	B C 3C
C539	B C 1C
C540	B C 2C
C541	B C 2C
C543	B C 2C
C544	B C 2C
C545	A D 2C
C546	B C 2B
C547	B C 4E
C548	B C 5E
C549	B C 4E
C550	B C 4E
C555	B C 2C
C556	B C 3C
C557	A D 5E
C558	B C 5B
C559	B C 5A
C561	B C 4D
C562	B C 5D
C563	B C 5D
C564	B C 5D
C565	A D 5D
C571	A D 2E
C572	B C 2E
C573	B C 2D
C574	B C 1E
C575	B C 3D
C576	B C 2D
C577	B C 1D
C578	A D 1D
C579	B C 1D
C580	A D 1E
C581	B C 2D
CONNECTOR	
CN501	A D 3E
CN502	A D 2A
CN504	A D 3E
DIODE	
D501	B C 1B
D502	B C 2B
IC	
IC501	B C 3C
IC502	A D 2D
COIL	
L501	A D 5B
L502	A D 6D
L503	A D 5E
L504	A D 4E
L506	A D 6D
L507	A D 4D
L508	A D 2E
L509	A D 1E
TRANSISTOR	
Q503	B C 2C
Q504	B C 5C
Q505	B C 4E
Q506	B C 5B
Q507	B C 3D
Q508	B C 5D
RESISTOR	
R501	B C 2B
R503	B C 2B
R504	B C 1B
R505	B C 2B
R507	B C 2B
R509	B C 3B
R510	B C 5C
R511	B C 5D
R512	B C 5D
R513	B C 3D
R514	B C 4D
R515	B C 1C
R516	B C 2C
R518	B C 4E
R519	B C 4E
R521	B C 4E
R526	B C 2C
R527	B C 2C
R528	B C 2C
R529	B C 3C
R533	B C 5C
R534	B C 5C
R535	B C 5C
R542	B C 4E
R545	B C 4A
R546	B C 4B
R547	B C 5A
R548	B C 4A
R549	B C 5B
R551	B C 3D
R552	B C 4D
R553	B C 4D
R555	B C 4D
R556	B C 5D
R557	B C 5D
R571	B C 2C
R572	B C 2E
R573	B C 2D
R574	B C 2E
R575	B C 2E
R576	B C 2D
R577	B C 1C
R578	B C 2E
R579	B C 1D
R580	B C 1D
R581	B C 1D
OTHER	
X501	A D 5D
X502	A D 2D

COMPONENT PARTS LOCATION GUIDE <TERMINAL> LPB10233-001C

REF.NO.	LOCATION
CAPACITOR	
C901	A D 6C
C902	B C 3B
C903	B C 2B
C904	B C 2B
C905	B C 3C
C906	B C 3B
C907	B C 2B
C908	B C 2B
C909	B C 2B
C910	B C 2C
C911	B C 1B
C912	B C 2B
C913	B C 2B
C914	A D 5C
C915	A D 5E
C916	A D 4E
C917	A D 4E
C918	B C 3D
C919	B C 2D
C920	B C 2D
C921	B C 3D
C922	B C 3C
C923	B C 2D
C924	B C 2D
C925	B C 2C
C926	B C 2D
C927	B C 2D
C928	B C 2D
C929	B C 2C
C930	B C 10B
C932	B C 10C
C934	B C 10C
C935	B C 11C
C937	A D 11C
C939	B C 11C
C940	B C 11C
C941	B C 11C
C942	A D 11C
C943	A D 11C
C944	A D 11B
C945	A D 11D
C946	A D 11D
C947	A D 11D
C948	A D 10D
C949	A D 10D
C950	A D 10D
C951	A D 10E
C952	A D 9D
C953	B C 8B
C954	B C 9B
C955	B C 9C
C956	A D 10B
C957	B C 10B
C960	B C 10B
C961	A D 9C
C962	B C 9C
C963	A D 6B
C964	B C 6B
C965	B C 8E
C966	B C 10C
C968	B C 10B
C971	A D 6E
C973	B C 6D
C981	A D 12D
C982	A D 12C
C983	A D 12C
C985	B C 14B
C986	B C 14B
C987	B C 14D
C988	B C 14D
C991	A D 6C
C992	A D 5C
C994	A D 12D
C996	B C 9A
C997	B C 8B
CONNECTOR	
CN913	A D 4A
CN914	A D 2A
CN915	A D 7A
DIODE	
D901	A D 6B
D902	A D 4C
D903	A D 6C
D904	A D 11C
D905	A D 10A
COIL	
L901	A D 3C
L902	A D 2B
L903	A D 2B
L904	A D 2B
L905	A D 3B
L906	A D 3D
L907	A D 2D
L908	A D 2D
L909	A D 2D
L910	A D 3C
L914	A D 10B
L917	A D 10B
L918	A D 9C
L919	A D 5A
L931	A D 2B
L932	A D 2B
L933	A D 2C
L934	A D 2C
L937	A D 14B
L938	A D 14D
TRANSISTOR	
Q901	B C 8D
Q902	B C 7D
Q903	B C 8D
Q904	B C 4C
Q907	B C 4C
Q908	B C 4C
Q909	B C 3C
Q912	B C 8C
Q913	B C 7C
Q917	B C 14E
Q918	B C 14E
Q919	B C 14D
Q932	B C 9B
Q933	B C 9B
Q936	B C 10B
Q941	B C 6E
Q942	B C 6D
Q943	B C 5D
Q944	B C 5E
RESISTOR	
R901	B C 8D
R902	B C 7D
R903	B C 8D
R904	B C 7D
R909	B C 5B
R910	B C 5C
R911	B C 4B
R912	B C 4B
R913	B C 3B
R914	B C 2C
R915	B C 2C
R918	B C 4C
R919	A D 3C
R920	B C 4C
R921	B C 4C
R922	B C 5D
R923	B C 5C
R924	B C 5D
R925	B C 4D
R926	B C 4D
R927	B C 2D
R928	B C 2D
R937	A D 11B
R939	A D 8D
R940	B C 8C
R941	A D 8D
R942	A D 8D
R943	B C 9D
R944	A D 7C
R945	A D 7B
R949	B C 13E
R950	B C 13E
R951	B C 14E
R952	B C 14E
R953	A D 14D
R954	B C 10A
R960	B C 10E
R961	B C 10D
R965	A D 6D
R966	B C 6D
R967	B C 6E
R968	B C 6D
R969	A D 7D
R971	B C 4D
R972	B C 13D
R976	A D 9B
R977	A D 9B
R978	B C 10B
R985	B C 13D
R986	B C 13C
R987	B C 13B
R988	B C 14B
R989	B C 14D
R990	B C 9B
R991	B C 8A
R992	B C 9B
R993	B C 9B
R994	B C 8B
R999	A D 11D

■ VOLTAGE CHARTS

<REGULATOR>

MODE PIN NO.	REC	PLAY
IC5101		
1	304.5	305.5
2	0	0
3	0	0
4	17.2	17.2
5	2.5	2.5
IC5301		
1	2.4	2.4
2	2.0	0
3	4.7	4.7
IC5302		
1	2.6	2.6
2	2.0	2.0
3	0	0
4	1.2	1.2
5	4.9	4.9
Q5304		
1(E)	0	0
2(B)	4.9	4.9
3(C)	29.2	29.1
4(E)	29.2	29.1
5(B)	0	0
6(C)	0	0
Q5305		
E	10.7	10.7
C	12.0	12.1
B	11.4	11.4
Q5306		
E	5.0	5.1
C	5.8	5.8
B	5.7	5.7
Q5307		
E	11.1	11.2
C	11.2	11.2
B	10.5	10.5
Q5308		
E	0	0
C	0	0
B	4.9	4.9
Q5313		
E	13.5	13.5
C	13.5	13.5
B	12.8	12.8
Q5314		
E	5.3	5.3
C	5.3	5.2
B	4.6	4.6
Q5315		
E	0	0
C	0	0
B	4.9	4.9
CN5302		
1	11.2	11.2
2	0	0
CN5303		
1	13.5	13.5
2	0	0
3	0	0
4	5.2	5.2

<MAIN>

MODE PIN NO.	REC	PLAY
IC1		
1	0	0
2	0	0
3	0	0
4	4.9	5.0
5	2.0	2.0
6	2.5	2.6
7	2.7	2.8
8	1.8	1.3
9	1.9	1.2
10	2.3	1.9
11	2.6	3.0
12	1.5	0.5
13	0	0
14	2.7	2.2
15	2.7	2.8
16	0	3.4
17	2.8	2.8
18	1.9	1.9
19	2.8	2.8
20	0	0
21	2.8	2.8
22	4.9	5.0
23	2.3	2.3
24	0	0.5
25	0	0
26	2.9	2.8
27	0.2	0.5
28	0	0
29	2.4	2.4
30	2.8	2.9
31	0.2	0.2
32	2.4	2.5
33	2.0	2.0
34	1.7	1.8
35	3.0	3.1
36	2.3	2.3
37	3.0	3.0
38	2.1	0.1
39	1.4	0
40	2.1	2.1
41	2.8	2.7
42	1.9	0
43	2.0	0
44	0	0
45	3.1	3.1
46	3.1	3.1
47	5.0	5.0
48	0	0
49	3.1	3.1
50	5.0	5.0
51	1.8	1.8
52	4.9	5.0
53	2.6	2.7
54	0	0
55	1.7	1.9
56	0	0
57	2.2	2.2
58	2.3	2.3
59	5.0	5.0
60	4.9	4.9
61	0	0
62	2.1	2.2
63	2.2	2.2
64	2.6	2.6
65	2.2	2.3
66	2.6	2.6
67	0.1	0.2
68	1.2	1.2
69	1.9	1.9
70	0	1.5
71	2.2	2.2
72	0	0
73	4.9	4.9
74	4.8	4.8
75	2.7	2.7
76	2.2	2.1
77	2.8	2.8
78	0	0
79	0.5	2.5
80	2.5	2.5
81	4.8	4.8
82	0	0
83	0	1.7
84	5.0	5.0
85	2.4	2.2
86	2.3	2.2
87	2.3	2.2
88	0	0
89	0	0
90	0	0
91	0	0
92	4.9	5.0
93	0.2	0.2
94	2.5	2.5
95	2.5	2.5
96	2.5	2.5
97	0	0
98	2.2	2.5
99	0	0
100	2.5	2.5
IC201		
1	0	0
2	2.6	2.6
3	5.0	5.0
4	0	0
5	4.8	4.2
6	2.4	2.4

MODE PIN NO.	REC	PLAY
7	2.4	2.5
8	5.0	5.0
9	3.3	0
10	4.6	4.6
11	4.8	4.8
12	5.0	5.0
13	2.8	2.8
14	2.8	0
15	0	0
16	1.2	1.2
17	0	0
18	5.0	5.0
19	2.4	2.4
20	0	0
21	2.4	2.4
22	0.7	0.4
23	5.0	5.0
24	2.9	2.9
25	2.6	2.5
26	5.0	5.0
27	4.8	4.2
28	3.6	3.6
29	5.0	5.0
30	5.0	5.0
IC2201		
1	2.4	2.4
2	0	0
3	2.2	2.4
4	0	0
5	0	0
6	2.5	2.4
7	0	2.0
8	0	0
9	0	0
10	0	0
11	0	0
12	2.0	2.0
13	0	0
14	0	0
15	0	0
16	2.4	2.5
17	0.5	0.5
18	2.5	2.3
19	2.5	2.5
20	2.5	0.9
21	2.4	0
22	2.5	0.7
23	0	0
24	2.5	0.6
25	4.9	5.0
26	2.5	0

MODE PIN NO.	REC	PLAY
10	0	0
11	0	0
12	0	0
13	0	0
14	0	0
15	0	0
16	6.2	6.2
IC2603		
1	0	0
2	0	0
3	0	0
4	-7.6	-7.7
5	0	0
6	0	0
7	0	0
8	10.7	10.7
IC2604		
1	0	0
2	0	0
3	0	0
4	0	0
5	0	0
6	0	0
7	-7.6	-7.5
8	0	0
9	5.0	5.0
10	0	0
11	0	0
12	0	0
13	0	0
14	0	0
15	0	0
16	6.2	6.2
IC2605		
1	0	0
2	0	0
3	0	0
4	-7.5	-7.5
5	0	0
6	0	0
7	0	0
8	10.5	10.7
IC2606		
1	7.0	7.0
2	0	0
3	7.0	7.0
4	0	0
5	6.4	6.4
6	0	-0.1
7	6.3	6.4
8	0	0
9	7.0	7.0
10	10.7	10.7
11	7.0	7.0
12	0	0
IC3001		
1	0	0
2	0	0
3	1.6	1.7
4	0	0
5	0.1	0.1
6	0	0.9
7	4.3	4.1
8	0	0
9	5.0	5.1
10	5.0	5.0
11	0	0
12	0	0
13	0	0
14	0	0
15	0	0
16	0	0
17	0	0
18	0	0
19	0	0
20	2.7	2.7
21	2.3	2.3
22	0	0
23	0	0
24	0	0
25	0	0
26	4.4	4.4
27	0	0
28	0	0
29	4.9	4.8
30	4.4	0
31	5.0	5.1
32	0	0
33	0	0
34	0	0
35	4.9	4.9
36	0	4.9
37	0	0
38	4.4	4.4
39	4.1	4.1

MODE PIN NO.	REC	PLAY
40	0	0
41	4.4	4.4
42	4.3	4.4
43	0	0
44	0	0
45	5.0	5.1
46	4.8	0
47	0.5	0.2
48	4.6	4.6
49	5.0	5.0
50	0	5.0
51	0.2	0.1
52	0.5	0.6
53	4.0	3.9
54	-	-
55	5.0	5.0
56	0	0
57	0	0
58	0	0
59	5.0	5.0
60	0	0
61	5.1	5.1
62	0	0
63	0	0
64	1.4	1.3
65	0.8	0.6
66	5.0	5.0
67	2.4	2.4
68	0	0
69	0	2.4
70	5.0	0
71	5.0	5.0
72	0	0
73	0	0
74	0	0
75	4.6	4.6
76	4.6	0
77	0	0
78	0	0
79	4.8	4.7
80	0	0
81	0	0
82	5.1	5.0
83	5.0	4.9
84	0	0
85	0	0
86	0	0
87	5.0	5.0
88	0	0
89	0	0
90	0	0
91	0	0
92	5.0	5.0
93	5.0	5.0
94	0	0
95	0	0
96	4.9	5.0
97	0	0
98	0	0
99	0	0.2
100	0	0.1
101	0	0
102	0	0
103	0.1	0.2
104	0.1	0.1
105	0	0
106	0	0
107	0	0
108	0	0
109	5.0	5.0
110	0	0.1
111	0	0
112	1.7	1.7
IC3002		
1	5.0	5.0
2	5.0	5.1
3	0	0
4	0	0
IC3004		
1	0	0
2	0	0
3	0	0
4	0	0
5	4.6	4.7
6	4.6	4.6
7	0	0
8	5.1	5.0
IC3301		
1	2.7	2.5
2	0	0
3	1.9	2.5
4	0	2.5
5	0	0.3
6	2.5	2.5
7	2.5	2.5
8	2.4	2.4
9	0	5.1
10	5.0	4.8
11	0	0
12	0	0
13	0	1.7
14	4.4	4.3
15	3.9	3.9
16	0	0
17	0	0
18	0	0
19	0	0
20	0	0

MODE PIN NO.	REC	PLAY
21	0	0
22	4.2	2.3
23	0	0
24	4.9	4.9
25	0	0
26	5.0	5.0
27	1.2	0
28	0	0
29	0	0
30	0	0
31	0	0
32	0	0
33	0	0
34	0	0.2
35	2.4	2.4
36	5.0	5.0
37	4.1	4.1
38	0	4.0
39	0	0
40	0	0
41	0	0
42	0	0
43	0	0
44	0	0
45	0	0.3
46	0	0
47	4.8	4.7
48	0	4.6
49	4.8	4.9
50	0	4.9
51	2.9	2.8
52	4.9	4.9
53	4.5	4.6
54	0	4.9
55	-	-
56	0	0
57	0	0
58	5.0	4.9
59	4.8	4.7
60	0	0
61	0	0
62	0	0
63	0	0
64	1.4	1.4
65	0.7	0.7
66	5.0	5.0
67	2.4	2.4
68	0	0
69	0	2.5
70	5.0	5.0
71	0	5.0

MODE PIN NO.	REC	PLAY
2	0.6	0.6
3	0	0
4	0	0
5	0	0
6	0	0
7	-4.1	-4.0
8	0	0
9	0	0
10	0	0
11	0	0
12	0	1.8
13	0	0.6
14	0	1.6
15	0	0.6
16	5.0	5.0
IC7501		
1	0	0
2	0	0
3	0	0
4	0	0
5	0	0
6	0	0
7	0	0
8	1.6	1.6
9	1.6	1.7
10	3.2	3.2
11	1.6	1.6
12	1.7	1.6
13	3.2	3.2
14	3.2	3.2
Q7		
E	2.4	2.3
C	2.4	2.2
B	0	0
Q8		
E	2.3	2.3
C	2.4	2.3
B	0	0
Q9		
E	0	0
C	0	0
B	0.7	0.7
Q10		
E	0	0
C	0	0
B	0.7	0.7
Q16		
E	3.0	3.0
C	0	0
B	2.4	2.4
Q2001		
E	-14.9	0
C	0	0
B	-21.7	0.7
Q2002		
E	-14.9	0
C	0	0
B	-21.5	0.5
Q2003		
E	5.0	5.0
C	-21.7	4.9
B	5.0	0
Q2051		
E	0	0
C	8.2	0.2
B	0.3	0.2
Q2052		
E	10.7	10.7
C	10.5	0.3
B	10.0	10.7
Q2053		
E	0	0
C	0	10.7
B	5.0	0
Q2054		
E	10.5	0.5
C	10.3	0.2
B	9.8	0.1
Q2055		
E	0	0
C	0	0.5
B	5.0	0
Q2201		
E	5.8	5.8
C	-0.3	-0.3
B	5.7	5.7
Q2202		
E	0	0
C	5.7	5.7
B	0	0
Q2203		
E	0	0
C	0	0
B	-0.2	-0.2
Q2204		
E	0	0
C	0	0
B	-0.2	-0.2
Q2255		
E	0	0
C	0	0
B	4.9	4.9
Q3004		
E	0	0
C	0	0
B	0.7	0.6
Q3007		
E	0	0

MODE PIN NO.	REC	PLAY
C	4.9	4.9
B	0	0
Q3011		
E	0	0
C	3.7	3.8
B	0	0
Q3012		
E	0	0
C	0	0
B	0.5	0.8
Q3013		
E	0	0
C	0	0
B	0.7	0
Q3014		
E	0	0
C	0	0
B	0.8	0.8
Q3015		
E	0	0
C	0	0
B	0.8	0.8
Q3016		
E	0	0
C	3.7	3.8
B	0	0
Q3017		
E	0	0
C	3.5	3.4
B	0	0
Q3302		
E	0	0
C	4.4	4.4
B	-	-
Q3303		
E	0	0
C	4.3	4.4
B	-	-
Q3304		
E	0	0
C	0	0
B	0.7	0.7
Q3305		
E	5.0	0
C	5.8	5.8
B	5.7	5.7
Q3401		
E	0	0
C	5.0	5.0
B	0	0
Q3901		
E	0	0
C	5.0	5.0
B	0	0

MODE PIN NO.	REC	PLAY
5	0	0
6	0	0
7	0	0
8	0	0
9	0	0
10	0	0
11	0	0
12	0	0
13	0	0
14	5.0	5.1
CN7114		
1	4.9	4.9
2	10.7	10.7
3	10.7	10.8
4	4.6	4.6
5	4.6	4.6
6	5.3	5.3
7	2.4	2.4
8	0	0.1
9	0	4.4
10	0	0
11	2.4	2.4
12	0	0
13	2.2	2.2
14	0	0
CN7115		
1	0	0
2	0	0
3	0	0.1
4	0	0
5	1.8	1.8
6	0	0
7	1.8	1.8
8	0	0
9	0.5	0.6
10	0	0
11	0.6	0.6
12	0	0
13	0	0.6
14	5.0	5.0
15	0	0
16	0	0
17	0	0
CN7116		
1	4.6	4.6
2	4.6	4.6
3	0	0
4	5.0	0
5	5.1	5.0
6	0	0
7	0	0
8	0	0

<TERMINAL>

MODE PIN NO.	REC	PLAY
IC901		
1	2.4	2.4
2	0	0
3	0	2.4
4	0	0
5	2.4	2.4
6	0	0.8
7	0.2	2.5
8	0	0
9	1.5	1.5
10	0	0
11	0	0
12	2.3	2.5
13	4.6	4.7
14	0	4.6
15	2.2	2.3
16	0	5.0
17	0	2.3
18	0	5.0
19	2.4	2.4
20	0	0
21	0	2.4
22	0	4.2
23	0	1.8
24	0	0
25	0	1.7
26	0	0
27	0	0
28	0	2.2
29	2.2	2.2
30	5.0	5.0
31	2.2	2.1
32	0	0
33	2.3	2.3
34	0	0
35	1.6	0
36	2.8	0
37	2.2	2.2
38	8.9	8.9
39	2.2	2.2
40	2.2	2.2
41	4.4	4.4
42	4.4	4.4
43	4.4	4.4
44	4.4	0.1
45	4.4	4.5
46	4.4	4.4
47	4.4	4.6
48	4.3	4.4
49	4.4	4.3
50	0	0.2
51	2.3	2.2
52	1.9	0.2
53	1.8	0.1
54	0	0.1
55	1.5	1.5
56	1.6	1.6
IC902		
1	0	0
2	1.5	1.6
3	0	1.6
4	2.4	2.4
5	5.0	5.0
6	2.4	2.4
7	1.5	1.5
8	1.5	1.5
Q901		
E	0	0
C	10.6	10.7
B	0	0
Q902		
E	10.2	10.2
C	10.7	10.7
B	10.6	10.7
Q903		
E	0	0.1
C	10.5	10.6
B	0	0.2
Q904		
E	0	0
C	0.6	0.9
B	0	0
Q907		
E	0	0.1
C	0	0.1
B	0.6	0.8
Q908		
E	2.9	2.9
C	0.1	0.1
B	4.2	4.2
Q912		
E	2.2	2.2
C	0	0
B	1.5	1.5
Q913		
E	3.1	3.1
C	0	0.1
B	2.5	2.4
Q917		
E	0	0
C	0	0
B	-0.2	-0.2
Q918		
E	0	0
C	0	0
B	-0.2	-0.2
Q919		
E	4.8	4.8

MODE PIN NO.	REC	PLAY
C	-0.3	-0.2
B	5.0	5.1
Q932		
E	2.3	2.4
C	0	0
B	3.2	3.2
Q933		
E	2.4	2.4
C	0	0
B	1.7	1.7
Q936		
E	3.1	3.1
C	0	0
B	2.4	2.5
Q941		
E	6.1	6.2
C	0	0
B	5.5	5.5
Q942		
E	0	0
C	0	0
B	8.0	8.0
Q943		
E	0	0
C	8.0	8.0
B	0	0

<TUNER>

MODE PIN NO.	REC	PLAY
Q6001		
E	5.1	5.2
C	5.8	5.8
B	5.8	5.8
Q6030		
E	4.4	4.4
C	0	0
B	3.9	3.8
Q6031		
E	0	0
C	3.7	3.8
B	0	0
Q6130		
E	4.3	0.7
C	0	0
B	3.8	0
Q6131		
E	0	0
C	3.8	0
B	0	4.9
TU6001		
1	5.1	5.2
2	0	0
3	0.3	0.3
4	0	0
5	0.4	0.3
6	0	0
7	0	0
8	2.2	2.3
9	0	0
10	0	0
11	5.1	5.0
12	5.0	5.0
13	-	-
14	4.9	4.9
15	0	0
16	32.5	32.5
17	0	0
18	0	0
19	4.1	4.1
20	0.4	0.3
21	2.5	2.5
22	0	0
23	2.8	2.8
24	3.8	1.6
TU6003		
1	0	0
2	0	0
3	0	0
4	0	0
5	0	0
CN6501		
1	0	0
2	4.6	4.6
3	4.6	0
4	0	0.1
5	0	0
6	0	0
7	4.9	5.0
8	0	0
9	0	0
10	0	0
CN6601		
1	0	0
2	4.7	4.2
3	4.7	4.2
4	0	0
5	0	0
6	0	0
7	0	5.0
8	0	0
9	0	0
10	0	0

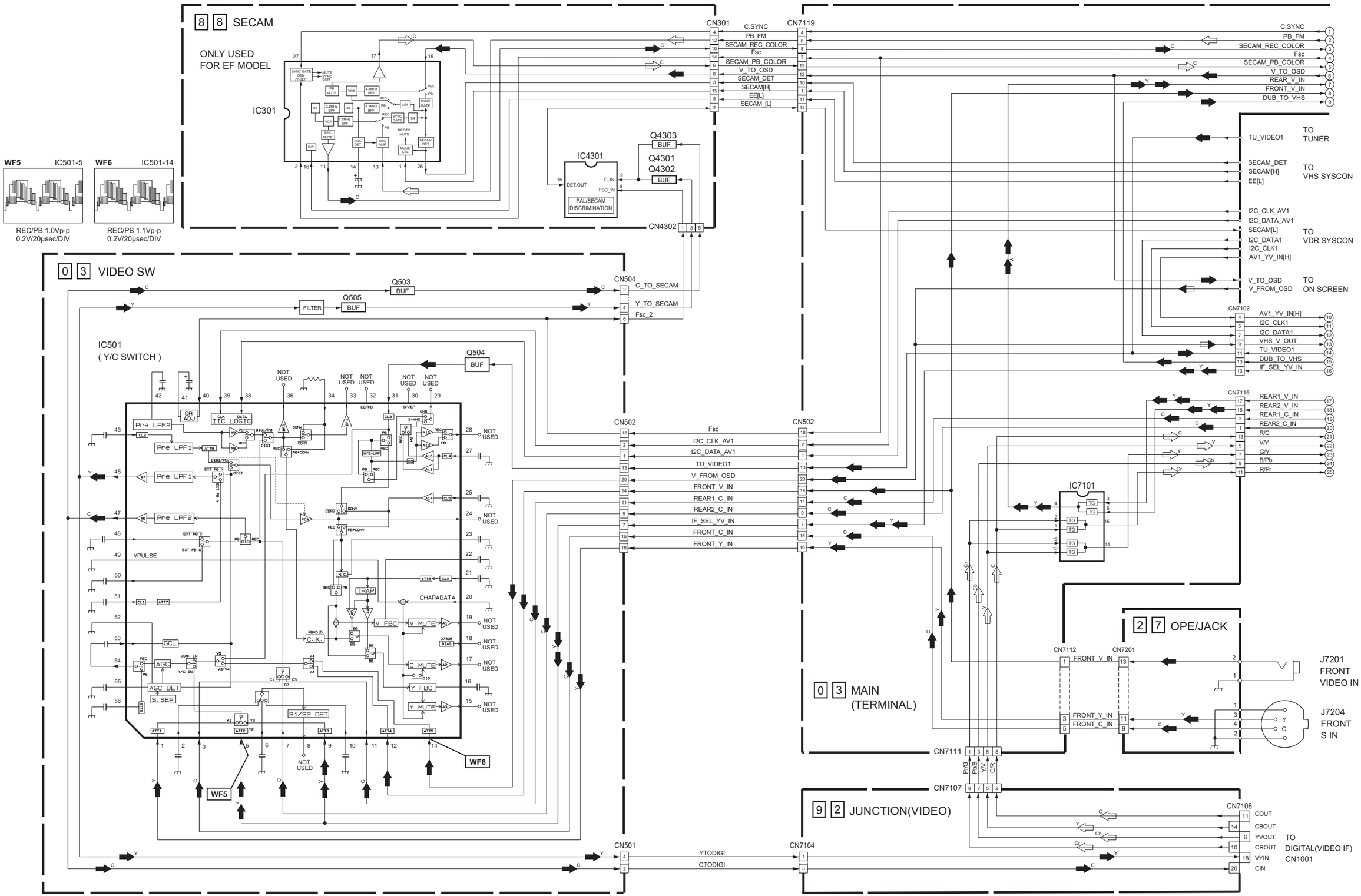
<DISPLAY>

MODE PIN NO.	REC	PLAY
IC7001		
1	5.0	5.0
2	5.0	5.0
3	5.0	5.0
4	5.0	5.0
5	2.8	2.8
6	4.9	4.9
7	0.3	0.3
8	4.6	4.6
9	4.1	0
10	0.5	0
11	0	0
12	0	0
13	5.0	5.0
14	-24.3	-24.4
15	-29.0	-29.1
16	-12.5	-19.7
17	-29.0	-29.0
18	-29.0	-29.0
19	-26.6	-26.7
20	-10.1	-17.2
21	-14.8	-22.0
22	-24.4	-26.8
23	-24.2	-26.7
24	-14.7	-17.2
25	0	-24.4
26	-29.0	0
27	-29.0	-0.1
28	0	0
29	-19.6	0
30	0	0
31	0	0
32	-27.0	-27.1
33	-27.0	-27.0
34	-27.0	-27.0
35	-27.0	-27.0
36	-27.0	-27.0
37	-26.9	-27.1
38	-26.9	-27.0
39	-26.9	-27.0
40	-26.9	-27.0
41	-26.9	-27.0
42	-26.9	-27.0
43	5.0	5.0
44	0	0
IC7002		
1	5.0	5.0
2	5.1	5.0
3	0	0
FW7001		
1	3.3	2.1
2	1.2	1.6
3	0	0
4	0	0
5	5.0	5.0

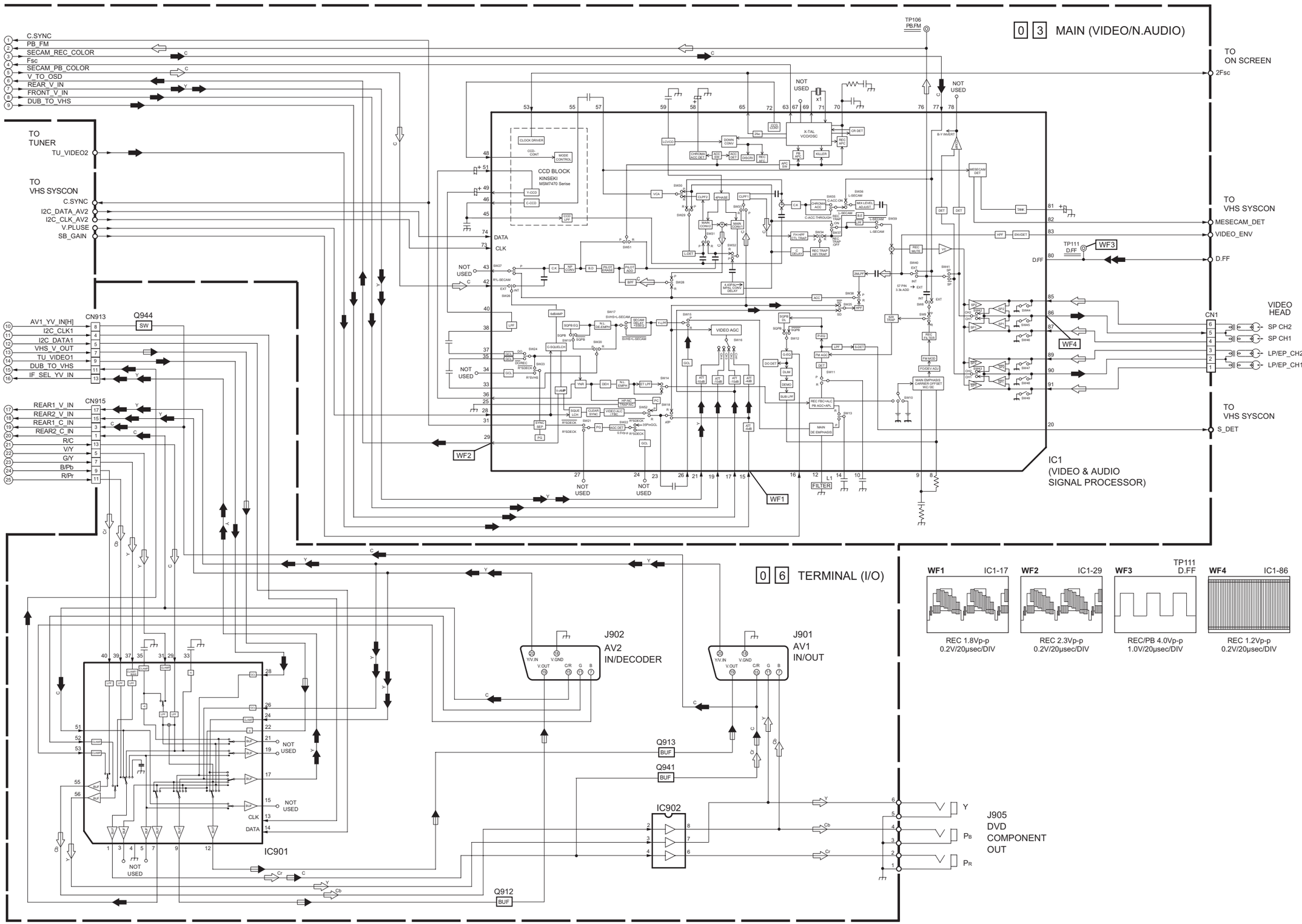
<VIDEO SW>

MODE PIN NO.	REC	PLAY
IC501		
1	2.7	2.8
2	0	0
3	4.9	2.1
4	4.9	5.0
5	0	0
6	0	0
7	0	0
8	0	0
9	0	0
10	0	0
11	2.7	2.7
12	0	0
13	0	0
14	2.8	2.8
15	1.0	2.7
16	2.4	0
17	2.4	0
18	1.5	0
19	0	0
20	0	0
21	2.5	2.7
22	2.7	3.0
23	2.8	2.8
24	2.8	2.8
25	2.8	0
26	4.9	4.9
27	2.3	2.1
28	2.2	0
29	2.2	2.2
30	2.8	0.3
31	2.8	2.8
32	2.8	0
33	2.7	0
34	2.8	0.1
35	2.7	0
36	0	0
37	0	0
38	0	5.0
39	0	5.0
40	0.1	0
41	0	2.6
42	0	2.8
43	3.0	0
44	0	1.5
45	0	0
46	0	5.0
47	0	0
48	2.7	0
49	0	0
50	0	0
51	0	0
52	0	0
53	0	0
54	0	2.4
55	0	1.8
56	0	2.5
IC502		
1	0	0
2	2.6	2.6
3	0	5.0
4	5.0	5.0
5	0	0
6	4.6	4.7
7	4.7	4.4
8	5.0	5.0
9	4.6	4.6
10	0	0
11	0	2.8
12	2.8	0
13	1.2	1.2
14	0.5	0.7
15	5.0	0
16	0	2.9

■ VIDEO BLOCK DIAGRAM(1)



■ VIDEO BLOCK DIAGRAM(2)



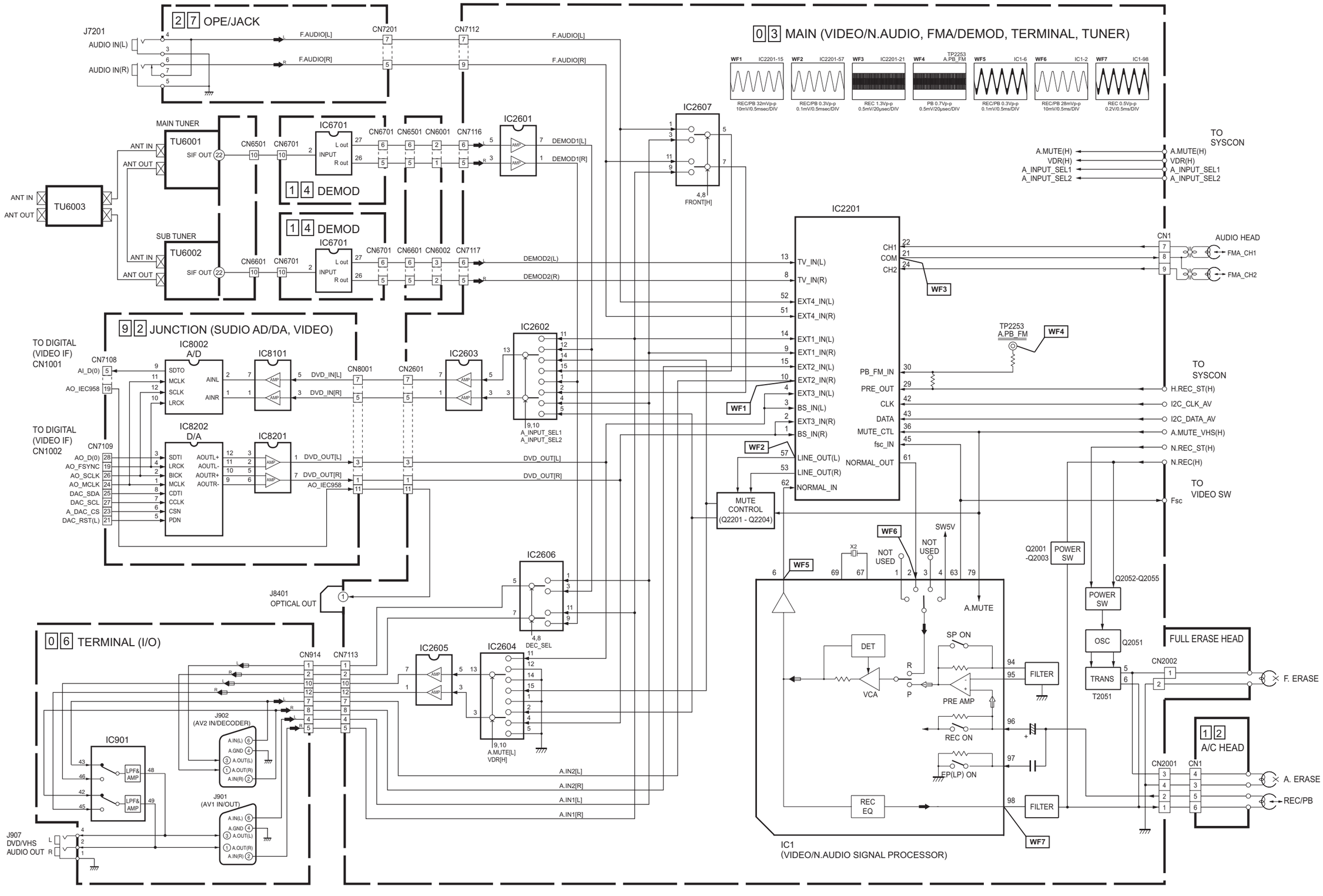
WF1 IC1-17
REC 1.8Vp-p
0.2V/20μsec/DIV

WF2 IC1-29
REC 2.3Vp-p
0.2V/20μsec/DIV

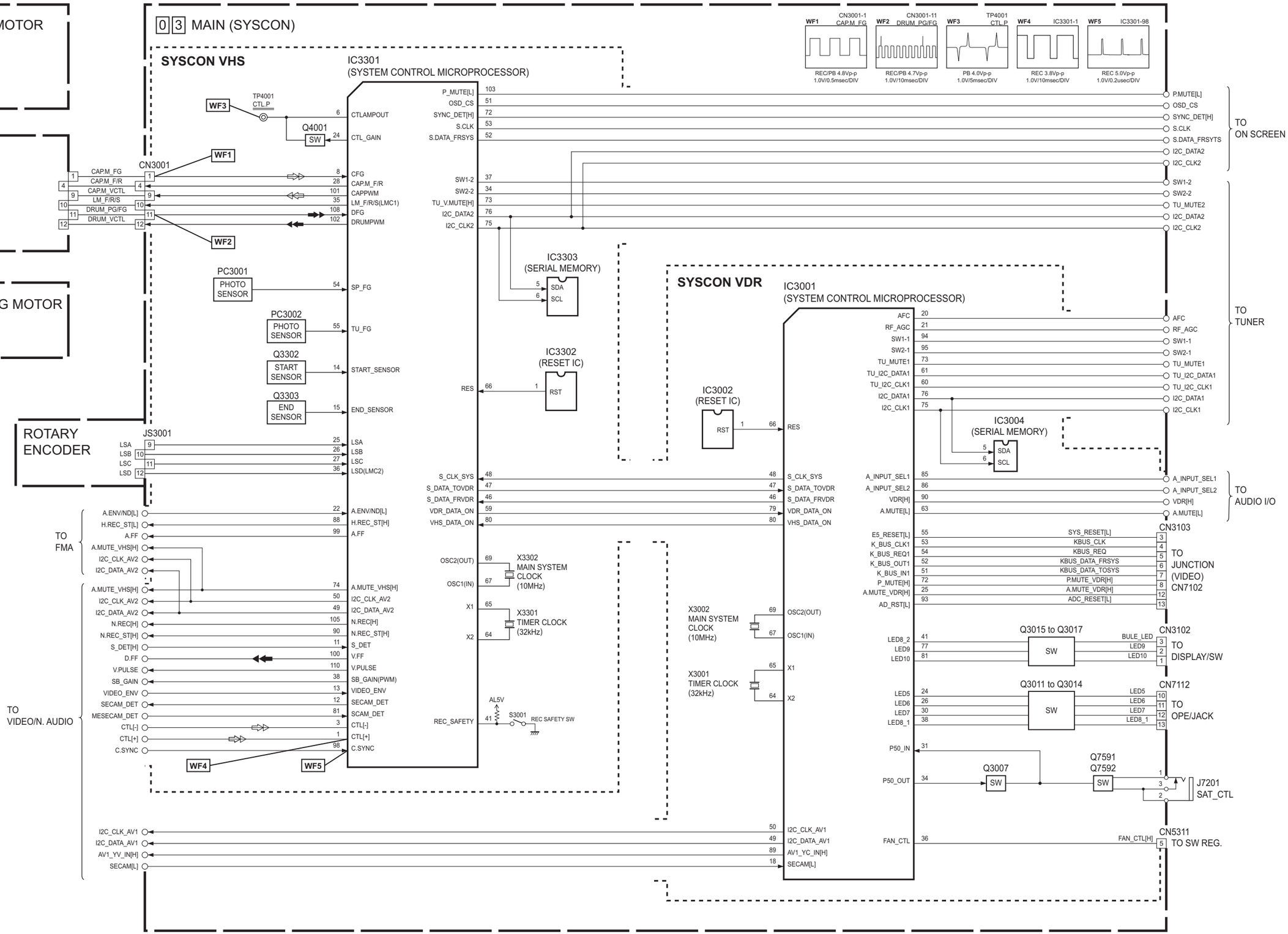
WF3 TP111 D.FF
REC/PB 4.0Vp-p
1.0V/20μsec/DIV

WF4 IC1-86
REC 1.2Vp-p
0.2V/20μsec/DIV

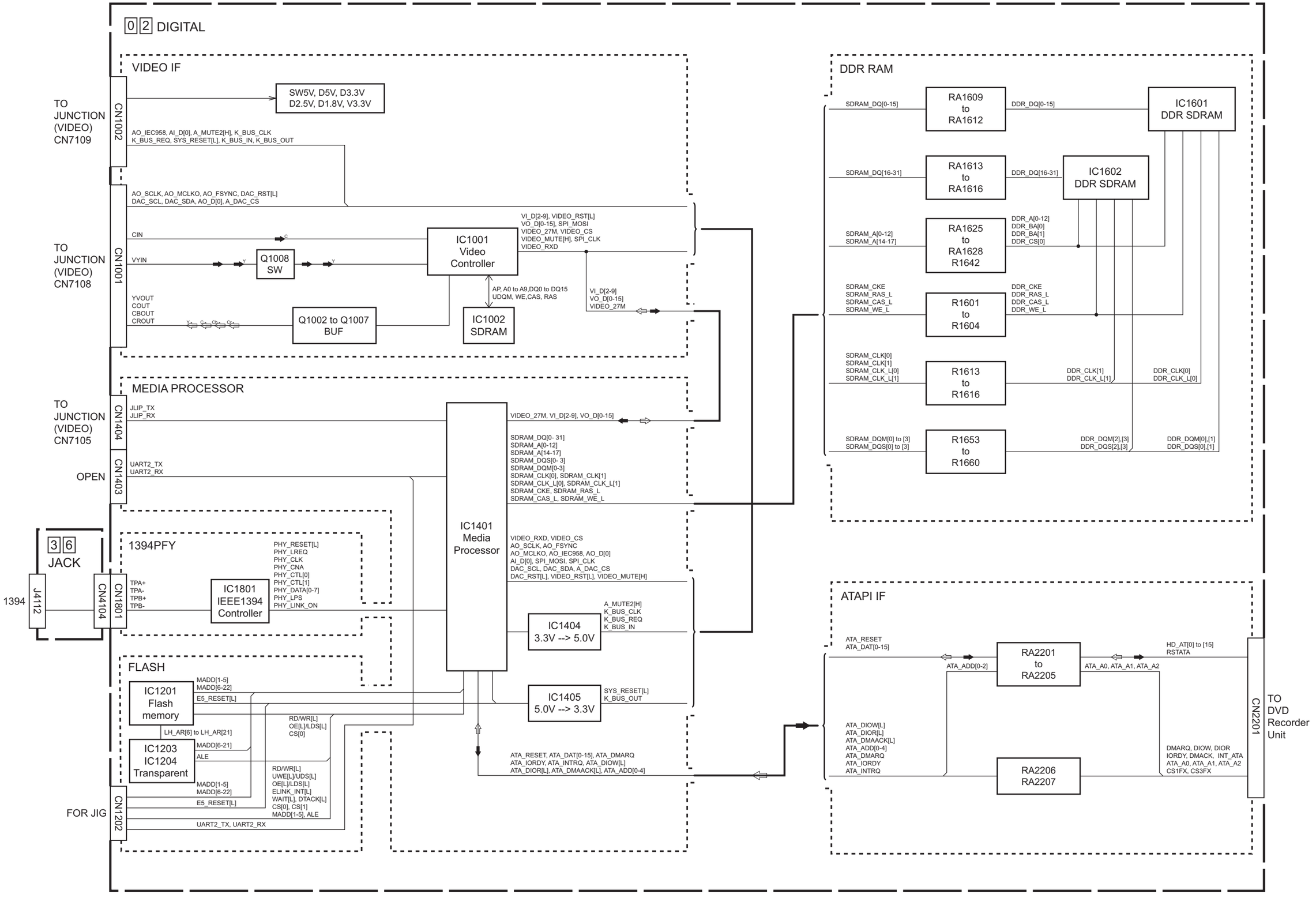
■ AUDIO BLOCK DIAGRAM



■ SYSTEM CONTROL BLOCK DIAGRAM



■ DIGITAL BLOCK DIAGRAM



■ CPU PIN FUNCTION

<VHS SYSCON IC3301>

PIN NO.	LABEL	IN/OUT	FUNCTION
1	CTL[+]	IN/OUT	CTL(+) SIGNAL
2	SVss	-	GND
3	CTL[-]	IN/OUT	CTL(-) SIGNAL
4	CTLBIAS	-	CTL BIAS VOLTAGE
5	CTLFB	IN	CTL PULSE FEEDBACK
6	CTLAMPOUT	OUT	CTL PULSE OUTPUT
7	CTLSMTIN	IN	CTL PULSE OUTPUT
8	CFG	IN	CAPSTAN FG PULSE INPUT
9	SVcc	-	SYSTEM POWER
10	Avcc	-	SYSTEM POWER
11	NORM/MESEC/S_DET	IN	SQPB:H/MESECAM:M/NORMAL:L
12	SECAN_DET	IN	SECAN MODE DETECT
13	VIDEO_ENV	IN	AUTO TRACKING DETECT/INPUT THE AVERAG OF PLAYBACK VIDEO SIGNAL
14	START_SENSOR	IN	START SENSOR
15	END_SENSOR	IN	END SENSOR
16	NC	-	NOT USED
17	PROTECT	IN	DETECTION SIGNAL FOR SWITCHING POWERSUPPLY
18	TEST	-	NOT USED
19	NC	-	NOT USED
20	NC	-	NOT USED
21	NC	-	NOT USED
22	A.ENV/ND[L]	IN	AUDIO PB FM ENV.INPUT/NON HiFi MODE:L
23	Avss	-	GND
24	CTL_GAIN/TEST	OUT	CONTROL AMP OUT FREQUENCY RESPONSE SWITCHIN
25	LSA	IN	MECHANISM MODE DETECT (A)
26	LSB	IN	MECHANISM MODE DETECT (B)
27	LSC	IN	MECHANISM MODE DETECT(C)
28	CAP.M_F/R	OUT	CAPSTAN MOTOR REVERSE CONTROL (FWD:L/REV:H)
29	NC	-	NOT USED
30	VHS_AV1[H]	OUT	VHS_AV1 MODE : H
31	NC	-	NOT USED
32	NC	-	NOT USED
33	NC	-	NOT USED
34	SW2-2	OUT	TV RF SYSTEM SELECT
35	LM_F/R/S[LMC1]	OUT	LOADING MOTOR DRIVE
36	LSD[LMC2]	IN	MECHANISM MODE DETECT (D)
37	SW1-2	OUT	TV RF SYSTEM SELECT
38	SB_GAIN[PWM]	OUT	VOLTAGE CONTROL SIGNAL FOR VIDEO FREQUENCY RESPONSE
39	NC	-	NOT USED
40	POWER_DET	IN	DETECTION SIGNAL FOR POWER DOWN OF AC POWER SUPPLY
41	NC	-	NOT USED
42	P.SAVE[L]	OUT	POWER SAVE MODE : L
43	Vss	-	GND
44	NC	-	NOT USED
45	Vcc	-	SYSTEM POWER
46	S_DATA_FRVDR	OUT	SERIAL DATA TRANSFER OUTPUT FROM THE THE VDR SYSCON CPU
47	S_DATA_TOVDR	IN	SERIAL DATA TRANSFER OUTPUT TO THE VDR SYSCON CPU
48	S_CLK_SYS	OUT	SERIAL DATA TRANSFER CLOCK FOR VDR SYSCON CPU
49	12C_DATA_AV2	IN/OUT	SERIAL DATA TRANSFER OUTPUT FOR A/V IC
50	12C_CLK_AV2	OUT	SERIAL DATA TRANSFER CLOCK FOR A/V IC
51	OSD_CS	OUT	ON-SCREEN IC CHIP SELECT
52	S.DATA_FRSYS	OUT	SERIAL DATA TRANSFER OUTPUT FROM THE FDP DRIVER TO THE ON-SCREEN
53	S.CLK	OUT	SERIAL DATA TRANSFERMER CLOCKFOR ONSCREEN IC
54	SP_FG	IN	DETECTION SIGNAL FOR SUPPLY REEL ROTATION/TAPE REMAIN
55	TU_FG	IN	DETECTION SIGNAL TAKE-UP REEL ROTATION/TAPE REMAIN
56	NC	-	NOT USED
57	NC	-	NOT USED
58	REC_SAFTY	IN	REC SAFETY SWITCH DETECT (SW ON:L)
59	VDR_DATA_ON	OUT	SERIAL DATA TRANSFER REQUEST TO VDR SYSCON CPU
60	NC	-	NOT USED
61	NC	-	NOT USED
62	FWE	-	FLASH WRITE ENABLE
63	NMI	-	NOT USED
64	X2	-	TIMER CLOCK(32kHz)
65	X1	-	TIMER CLOCK(32kHz)
66	RES	-	RESET TERMINAL(RESET ON:L)
67	OSC1[IN]	IN	MAIN SYSTEM CLOCK(10MHz)
68	Vss	-	GND
69	OSC2[OUT]	IN	MAIN SYSTEM CLOCK(10MHz)
70	Vcc	-	SYSTEM POWER
71	MODE	-	NOT USED
72	SYNC_DET[H]	IN	DETECTION OF VIDEO SYNC SIGNAL (DETECTED : H)
73	TU_V.MUTE[H]	OUT	TUNER VIDEO SIGNAL MUTE : H
74	A.MUTE_VHS[H]	OUT	AUDIO MUTE CONTROL FOR VHS(MUTE:H)
75	12C_CLK2	OUT	SERIAL DATA TRANSFER CLOCK FOR MEMORY IC
76	12C_DATA2	IN/OUT	SERIAL DATA TRANSFER OUTPUT FOR MEMORY IC
77	SECAN[H]	IN	SECAN MODE :H
78	P.ON_PULSE	OUT	POWER ON/OFF PULSE OUTPUT
79	PAL_PB[H]	IN	PAL FM (PB ON:H)
80	VHS_DATA_ON	IN	SERIAL DATA TRANSFER REQUEST TO VHS SYSCON CPU
81	MESECAN_DET	OUT	MESECAM:H
82	Vcc	-	SYSTEM POWER
83	NC	-	NOT USED
84	Vss	-	GND
85	SP_SHORT[H]	OUT	MODE SELECT
86	LP_SHORT[H]	OUT	MODE SELECT
87	NC	-	NOT USED
88	H.REC_ST[H]	OUT	HiFi AUDIO SOUND RECORDING START
89	NC	-	NOT USED
90	N.REC_ST[H]	OUT	NORMAL AUDIO SOUND RECORDINGSTART
91	NC	-	NOT USED
92	NC	-	NOT USED
93	NC	-	NOT USED
94	NC	-	NOT USED
95	NC	-	NOT USED
96	NC	-	NOT USED
97	NC	-	NOT USED
98	C.SYNC	IN	COMPOSITE SYNC INPUT
99	A.FF	OUT	AUDIO FF OUTPUT
100	V.FF	OUT	ROTATION DETECTION SIGNAL FOR DRUM MOTOR/ TIMING CONTROL SIGNAL FOR REC
101	CAPPWM	OUT	CAPSTAN MOTOR CONTROL
102	DRUMPWM	OUT	DRUM MOTOR CONTROL
103	P.MUTE[L]	OUT	PICTURE MUTE CONTROL (MUTE ON : L)
104	NC	-	NOT USED
105	N_REC[H]	OUT	NORMAL AUDIO REC MODE CONTROL SIGNAL (REC:H)
106	NC	-	NOT USED
107	EE[L]	OUT	EE MODE:L
108	DFG	IN	DRUM FG PULSE INPUT
109	Vcc	-	SYSTEM POWER
110	V.PULSE	OUT	V.PULSE ADDITION TIMING CONTROL
111	Vss	-	GND
112	CTLREF	-	CTL REFERENCE VOLTAGE

■ CPU PIN FUNCTION

<VDR SYSCON IC3001>

PIN NO.	LABEL	IN/OUT	FUNCTION
1	NC	-	NOT USED
2	SVss	-	GND
3	NC	-	NOT USED
4	NC	-	NOT USED
5	NC	-	NOT USED
6	NC	-	NOT USED
7	NC	-	NOT USED
8	NC	-	NOT USED
9	SVcc	-	SYSTEM POWER
10	Avcc	-	SYSTEM POWER
11	NC	-	NOT USED
12	NC	-	NOT USED
13	NC	-	NOT USED
14	NC	-	NOT USED
15	NC	-	NOT USED
16	NC	-	NOT USED
17	TEST	-	NOT USED
18	SECAM[L]	IN	SECAM MODE : L
19	NC	-	NOT USED
20	AFC1	OUT	TUNING CHECK
21	RF_AGC	IN	CHANGES IN ATS+IC OUTPUT AS CAUSED BY CHANGES IN RECEIVER SENSITIVITY WHEN RHE SAME CHANNEL IS RECEIVED MORE ARE INPUT.
22	SCR_ID	IN	SCRAMBLE CONTROL INPUT (SCRAMBLE : H)
23	Avss	-	GND
24	LED5[VHS_TIMER]	OUT	VHS TIMER SAND-BY LED ON/OFF CONTROL
25	A.MUTE_VDR[H]	OUT	AUDIO MUTE CONTROL FOR VDR (MUTE ON : H)
26	LED6[VHS]	OUT	VHS LED ON/OFF CONTROL
27	NC	-	NOT USED
28	NC	-	NOT USED
29	RC_IN	IN	REMOTE CONTROL DATA INPUT
30	LED7[VHS_REC]	OUT	VHS REC LED ON/OFF CONTROL
31	P50_IN	IN	CONTROL SIGNAL FOR TV LINK
32	COMPU_IN	IN	AV COMPULINK INPUT
33	COMPU_OUT	OUT	AV COMPULINK OUTPUT
34	P50_OUT	OUT	CONTROL SIGNAL FOR TV LINK
35	P.CTL1[H]	OUT	CONTROL SIGNAL FOR SWITCHING POWER SUPPLY
36	FAN_CTL	OUT	FAN MOTOR ON/OFF CONTROL
37	NC	-	NOT USED
38	LED8_1[BLUE]	OUT	ILLUMINATION LED CONTROL
39	STB	OUT	STROBE SIGNAL
40	POWER_DET	IN	DETECTION SIGNAL FOR POWER DOWN OF AC POWER SUPPLY
41	LED8_2[BLUE]	OUT	ILLUMINATION LED CONTROL
42	PROTECT	IN	DETECTION SIGNAL FOR SWITCHING POWER SUPPLY
43	Vss	-	GND
44	RMO	OUT	REMOTE CONTROL SIGNAL OUTPUT FOR OTHER UNIT
45	Vcc	-	SYSTEM POWER
46	S_DATA_TOVDR/FLASH	IN	SERIAL DATA TRANSFER OUTPUT TO VDR SYSCON CPU
47	S_DATA_FRVDR/FLASH	OUT	SERIAL DATA TRANSFER OUTPUT FROM VDR SYSCON CPU
48	S_CLK_SYS	OUT	SERIAL DATA TRANSFER CLOCK FOR V,g,r SCON CPU
49	12C_DATA_AV1	IN/OUT	SERIAL DATA TRANSFER OUTPUT FOR MEMORY IC
50	12C_CLK_AV1	OUT	SERIAL DATA TRANSFER CLOCK FOR MEMORY IC
51	K_BUS_IN1	IN	SERIAL DATA TRANSFER INPUT FROM DVD CPU
52	K_BUS_OUT1	OUT	SERIAL DATA TRANSFER OUTPUT TO DVD CPU
53	K_BUS_CLK1	OUT	SERIAL DATA TRANSFERMER CLOCK FOR DVD CPU
54	K_BUS_REQ1	OUT	SERIAL DATA TRANSFER REQUEST TO DVD CPU
55	E5_RESET[L]	OUT	RESET OUTPUT TO IC1401
56	FLASH	-	FOR REWRITTING PROGRAM

PIN NO.	LABEL	IN/OUT	FUNCTION
57	FLASH	-	FOR REWRITTING PROGRAM
58	FLASH	-	FOR REWRITTING PROGRAM
59	NC	-	NOT USED
60	TU_12C_CLK1	OUT	CLOCK OUTPUT TO TUNER
61	TU_12_DATA1	OUT	DATA OUT PUT TO TUNER
62	FWE	-	FLASH WRITE ENABLE
63	NC	-	NOT USED
64	X2	-	TIMER CLOCK(32kHz)
65	X1	-	TIMER CLOCK(32kHz)
66	RES	-	RESET TERMINAL(RESET ON:L)
67	OSC1	IN	MAIN SYSTEM CLOCK(10MHz)
68	Vss	-	GND
69	OSC2	IN	MAIN SYSTEM CLOCK(10MHz)
70	Vcl	-	NOT USED
71	MODE	-	NOT USED
72	P.MUTE[H]	OUT	PICTURE MUTE CONTROL (MUTE : H)
73	TU_V.MUTE1[H]		TUNER VIDEO MUTE CONTROL (MUTE:H)
74	SEPA_IN	OUT	Y/C SEPARATE INPUT MODE
75	12C_CLK1	OUT	SERIAL DATA TRANSFER CLOCK FOR MEMORY IC
76	12C_DATA1	-	SERIAL DATA TRANSFER OUTPUT FOR MEMORY IC
77	LED9[VDR_TIMER]	OUT	VDR TIMER STAND-BY LED ON/OFF CONTROL
78	P.ON_PULSE	OUT	POWER ON/OFF PULSE OUTPUT
79	VDR_DATA_ON	IN	SERIAL DATA TRANSFER REQUEST TO VDR SYSCON CPU
80	VHS_DATA_ON	OUT	SERIAL DATA TRANSFER REQUEST TO VHS SYSCON CPU
81	LES10[VDR]	OUT	VDR LED ON/OFF CONTROL
82	Vcc	-	SYSTEM POWER
83	A.MUTE[L]	OUT	AUDIO MUTE CONTROL (MUTE ON : L)
84	Vss	-	GND
85	A_INPUT_SEL1	OUT	AUDIO SIGNAL INPUT SELECT-1
86	A_INPUT_SEL2	OUT	AUDIO SIGNAL INPUT SELECT-2
87	DEC_SEL	OUT	DECODER SELECT
88	FRONT[H]	OUT	FRONT INPUT MODE : H
89	AV1_YC_IN[H]	OUT	Y/C SEPARATE INPUT MODE OF AV1 : H
90	VDR[H]	OUT	VDR MODE : H
91	RGB[H]	OUT	RGB MODE : H
92	SYNC_DET	IN	DETECTION OF VDR VIDEO SIGNAL
93	AD_RST[L]	OUT	A/D CONVERTER RESET PULSE OUTPUT
94	SW1_1	OUT	TV RF SYSTEM SELECT-1
95	SW2_1	OUT	TV RF SYSTEM SELECT-2
96	P.SAVE[L]	OUT	POWER SAVE MODE:H
97	NC	-	NOT USED
98	NC	-	NOT USED
99	NC	-	NOT USED
100	NC	-	NOT USED
101	NC	-	NOT USED
102	NC	-	NOT USED
103	NC	-	NOT USED
104	NC	-	NOT USED
105	NC	-	NOT USED
106	NC	-	NOT USED
107	NC	-	NOT USED
108	NC	-	NOT USED
109	Vcc	-	SYSTEM POWER
110	NC	-	NOT USED
111	Vss	-	GND
112	NC	-	NOT USED

JVC
Victor Company of Japan, Limited
AV & MULTIMEDIA COMPANY VIDEO DISPLAY CATEGORY 12, 3-chome, Moriya-cho, kanagawa-ku, Yokohama, kanagawa-prefecture, 221-8528, Japan

(No.YD014)

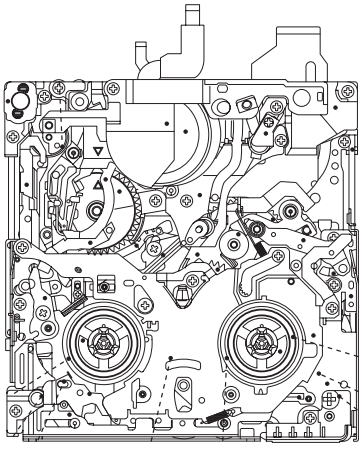
Printed in Japan
WPC

JVC

SERVICE MANUAL

MECHANISM ASSEMBLY

DVC MECHANISM
VHS-C MECHANISM
VHS MECHANISM



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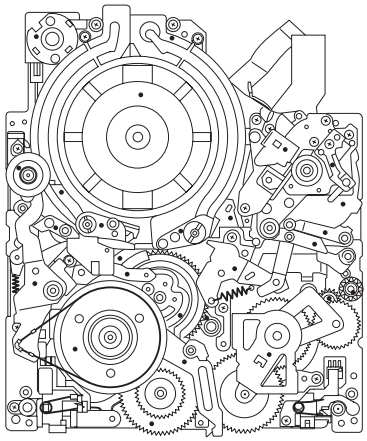

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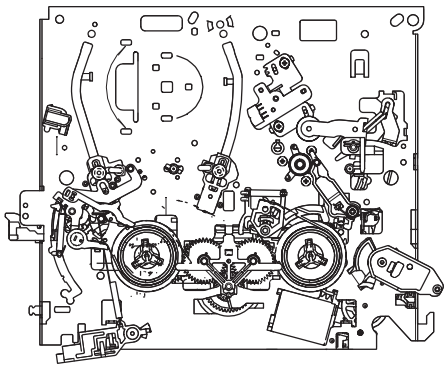

<VHS MECHANISM>

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2 SPECIFIC SERVICE INSTRUCTIONS 2-1
3 PARTS LIST 3-1

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No.86700
2003/04

SECTION 1
JIGS AND TOOLS

1.1 TOOLS REQUIRED FOR ADJUSTMENTS

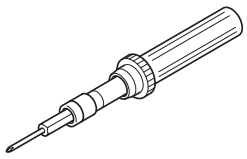
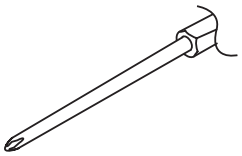
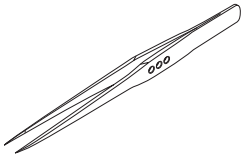
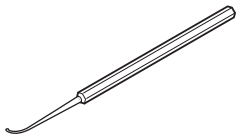
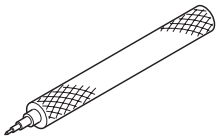
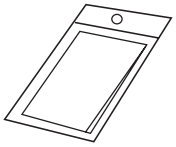
1. Torque driver YTU94088	2. Bit YTU94088-003
	
3. Tweezers P-895	4. Chip IC replacement jig PTS40844-2
	
5. Slit washer installation jig YTU94121A	6. Cleaning cloth KSMM-01
	

Fig.1-1-1

1. Torque driver
Be sure to use to fastening the mechanism and exterior parts because those parts must strictly be controlled for tightening torque.
Torque setting value of torque driver is limited. At the values over the maximum torque setting value, fasten a screw manually not to damage the screw thread.

2. Bit
This bit is slightly longer than those set in conventional torque drivers.

3. Tweezers
To be used for removing and installing parts and wires.

4. Chip IC replacement jig
To be used for replacement of part.

5. Slit washer installation jig
To be used to install slit washers.

6. Cleaning cloth
Recommended cleaning cloth to wipe down the video heads, mechanism (tape transport system), optical lens surface.

SECTION 2
SPECIFIC SERVICE INSTRUCTIONS

2.1 DVC MECHANISM

2.1.1 Precautions

(1) When fastening parts, pay careful attention to the tightening torque of each screw. Unless otherwise specified, tighten a screw with the torque of 0.055 N•m (0.56 kgf•cm).
(2) Be sure to disconnect the set from the power supply before fastening and soldering parts.
(3) When disconnecting/connecting wires, be careful not to get them and their connectors damaged.
(4) When replacing parts, be very careful neither to damage other parts nor to fit wrong parts by mistake.

2.1.2 Notes on procedure for disassembly/assembly

The disassembling procedure table (Fig. 2-1-10 on page 2-4,a part of the table is shown below for reference)shows the procedure to disassemble/reassemble mechanism parts.
Carefully read the following explanation before starting actual disassembling/reassembling work. The item numbers(circled numbers)in the following explanation correspond to those appearing under respective columns of the table.

Example

NO.	PART NAME		FIG.	POINT	NOTE	REMARKS
[1]	CASSETTE HOUSING ASSY	T	Fig.2-4-3	3(S1),(L1a)-(L1e)	**NOTE 1 a,b,c,d**	ADJUSTMENT
[2]	UPPER BASE ASSY	T	Fig.2-4-4	(S2),(L2a),(L2b)	**NOTE 2**	
[3]	DRUM ASSY	T		(S3a),2(S3b)	**NOTE 3 a,b**	
[4]	REEL DISK ASSY(SUP)	T	Fig.2-4-5	(W4)	**NOTE 4 a**	
[5]	REEL DISK ASSY(TU)	T		(W5a),(W5b),(W5c)	**NOTE 5 a,b**	
[6]	REEL COVER ASSY	T		(W6),(S6a),2(S6b)	**NOTE 6**	ADJUSTMENT

*1 *2 *3 *4 *5 *6 *7

*1 Numbers appearing in this column indicate the order to remove parts. When reassembling, follow these numbers in the reverse order. Circled numbers in this column correspond to those appearing in drawings of this section.
*2 This column shows part names corresponding to numbers in the left column.
*3 The symbol (T or B)appearing in this column shows the side which the objective part is mounted on.
T =the upper side, B =the lower side
*4 Symbols appearing in this column indicate drawing numbers.
*5 This column indicates parts and points such as screws, washers,springs,and others to be removed/fitted for disassembling/reassembling the mechanism. Besides such the parts, this column occasionally indicates working points.

P = Spring
W = Washer
S = Screw
* = Lock (L),soldering (SD),shield,connector (CN),etc.

Example

- Remove (W1)=Washer W1.
- Remove the solder at (SD1)=Point SD1.
- Disconnect A = Connector A.

*6 Numbers in this column represent the numbers of notes in the text.
(For parts that need phase adjustment after reassembling, refer to “MECHANISM ADJUSTMENTS”.)
*7 This column indicates required after-disassembling/-reassembling work such as phase adjustment or mechanism adjustment.

2.1.3 DISASSEMBLY AND ASSEMBLY OF MECHANISM ASSEMBLY

2.1.3.1 General statement

The mechanism should generally be disassembled/assembled in the C.IN mode (ASSEMBLY mode). (Refer to Fig. 2-1-1,2-1-2.) However, when the mechanism is removed from the main body, it is set in the STOP mode. Therefore, after the mechanism is removed from the main body, supply 3 V DC to the electrode on the top of the loading motor to enter the mechanism mode into the C IN mode compulsory.

<Mechanism assembly/Cassette housing assembly>

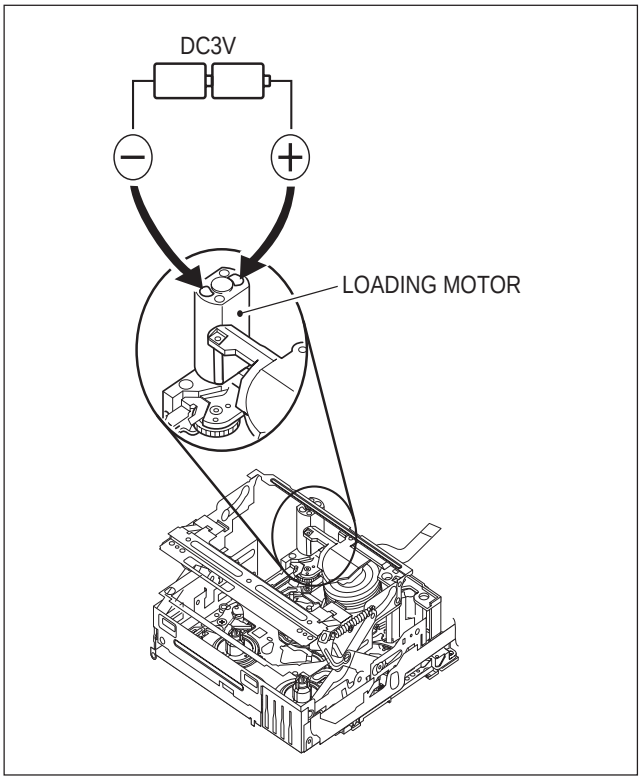


Fig.2-1-1

<Back side of the mechanism assembly>

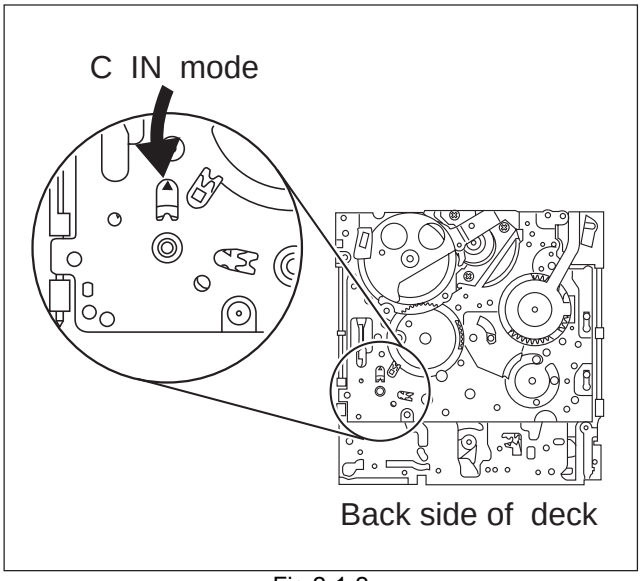


Fig.2-1-2

2.1.3.2 Explanation of mechanism mode

The mechanism mode of this model is classified into five modes as shown in Fig. 2-1-9. Each mechanism mode can be distinguished from others by the relative position of "△", "○", "⬭", "□" marks on the sub cam gear to the inner or outer protrusion on the main deck.

Refer to Fig. 2-1-3 to 2-1-8 below.

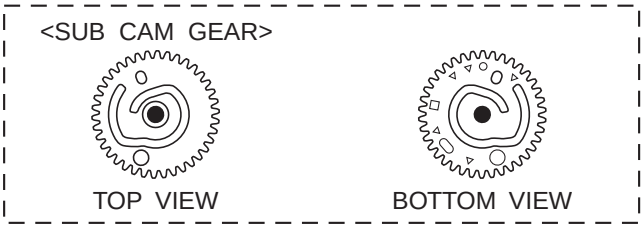


Fig.2-1-3

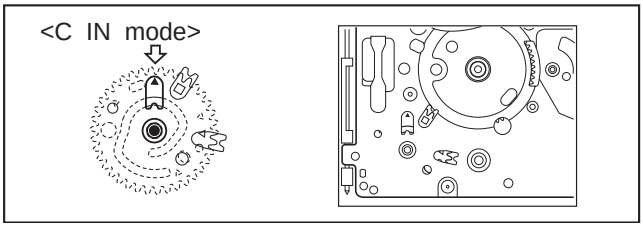


Fig.2-1-4

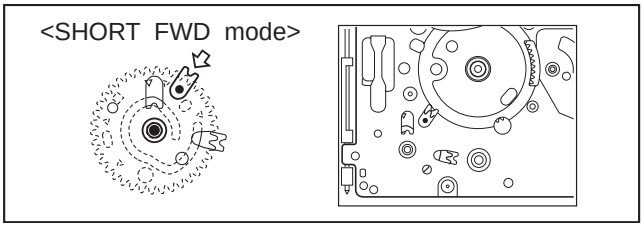


Fig.2-1-5

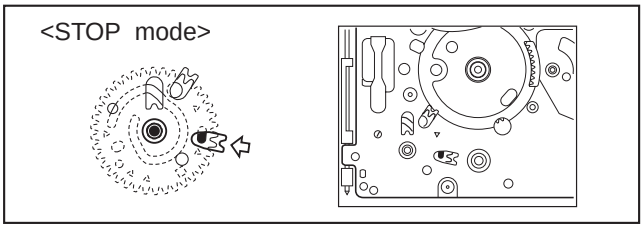


Fig.2-1-6

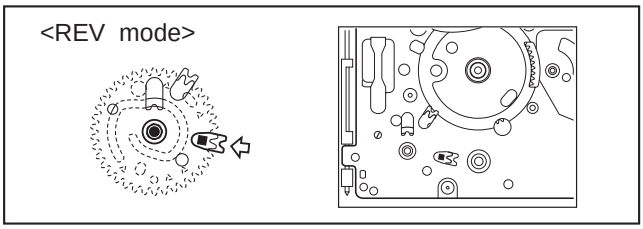


Fig.2-1-7

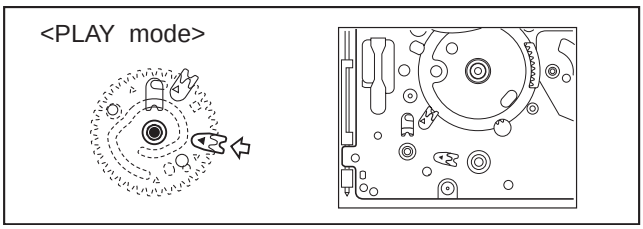


Fig.2-1-8

2.1.3.3 Mechanism timing chart

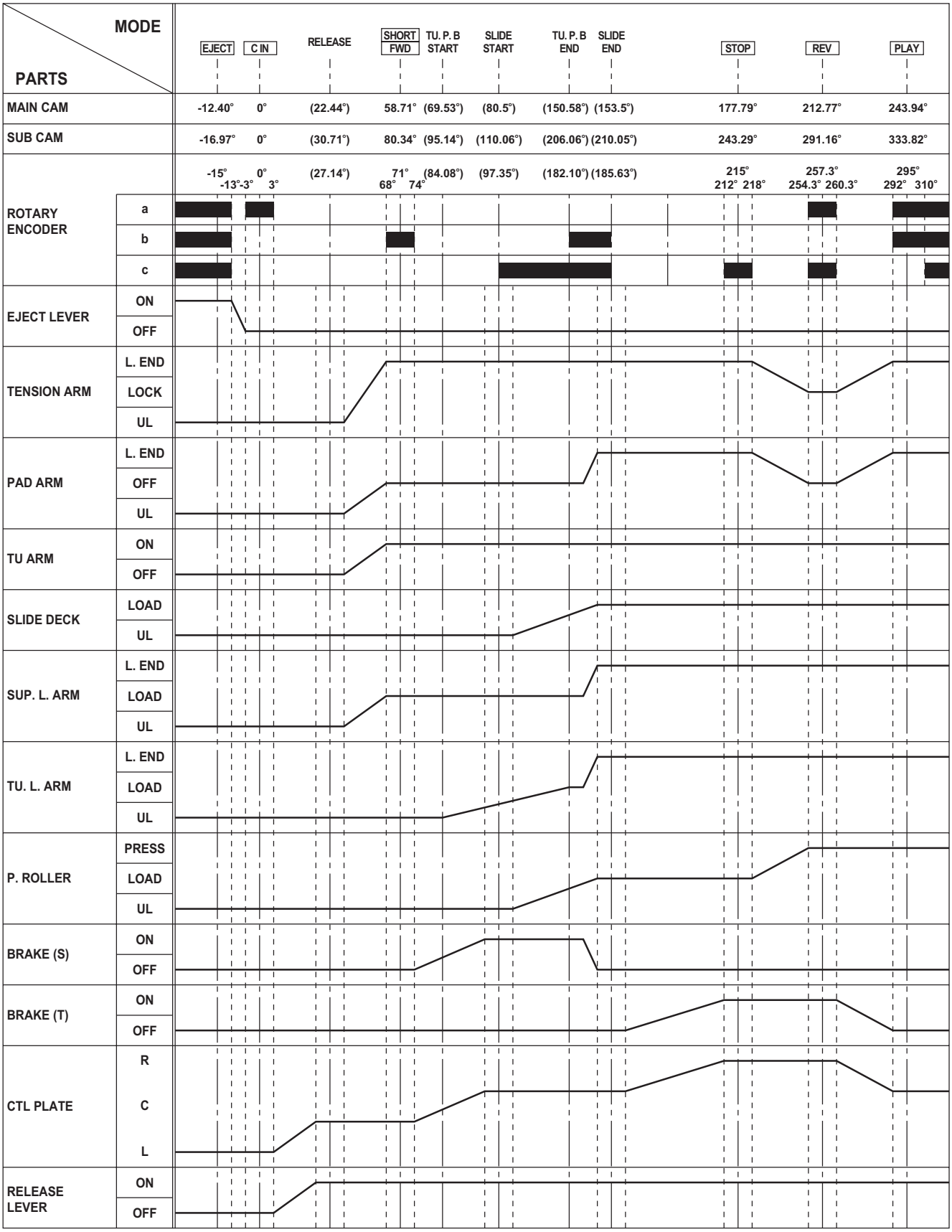


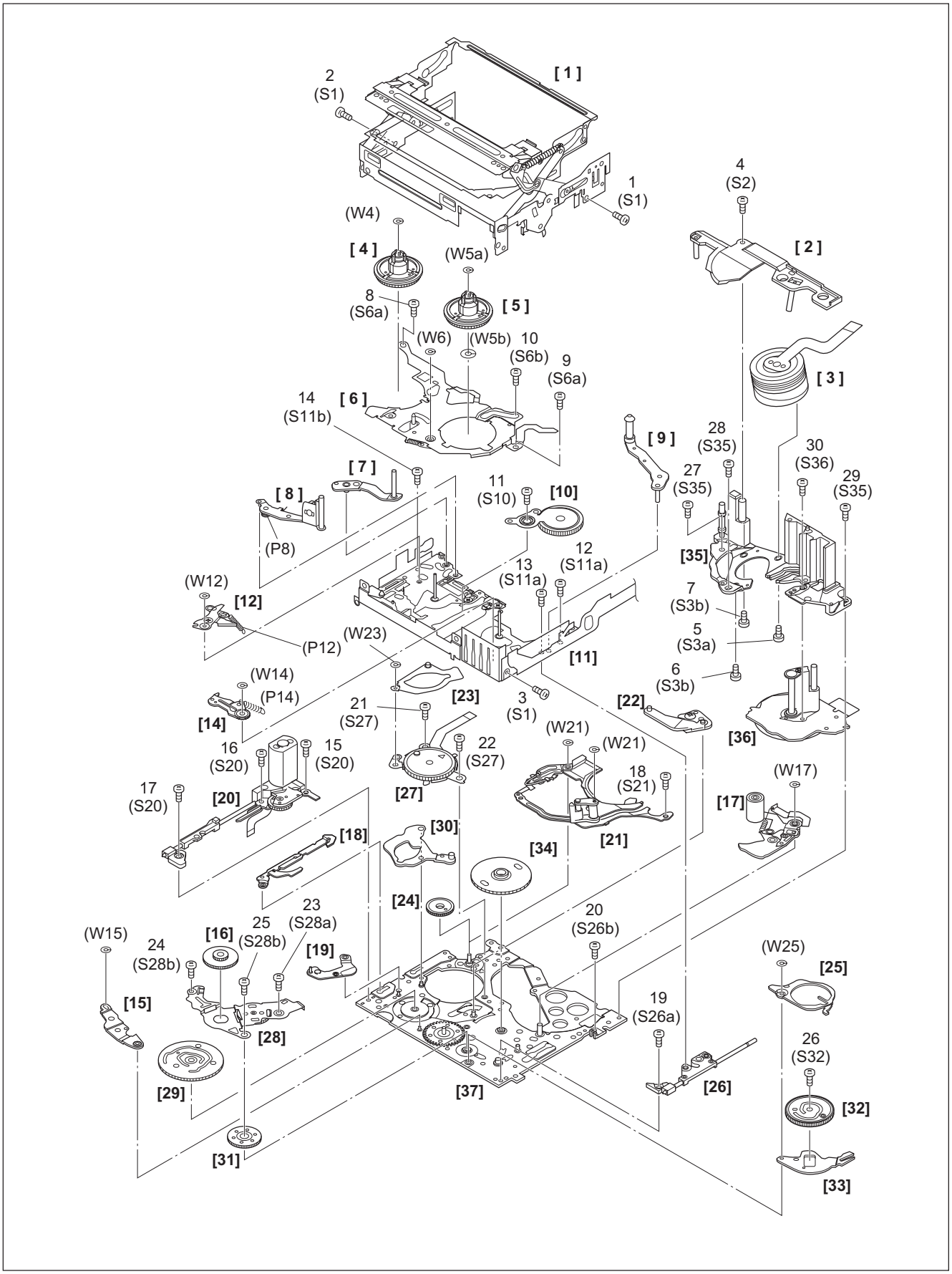
Fig.2-1-9

2.1.4 DISASSEMBLY PROCEDURE TABLE

MARK: # After assembly, perform adjustments.

NO.	PART NAME		FIG.	POINT	NOTE	REMARKS
[1]	CASSETTE HOUSING ASSY	T	Fig.2-1-14	3(S1),(L1a)-(L1e)	**NOTE 1 a,b,c,d**	ADJUSTMENT
[2]	UPPER BASE ASSY	T	Fig.2-1-15	(S2),(L2a),(L2b)	**NOTE 2**	
[3]	DRUM ASSY	T		(S3a),2(S3b)	**NOTE 3 a,b**	ADJUSTMENT
[4]	REEL DISK ASSY(SUP)	T	Fig.2-1-16	(W4)	**NOTE 4**	
[5]	REEL DISK ASSY(TU)	T		(W5a),(W5b)	**NOTE 5 a,b**	
[6]	REEL COVER ASSY	T		(W6),2(S6a),(S6b)	**NOTE 6**	
[7]	TENSION ARM ASSY	T	Fig.2-1-17	(L7)	**NOTE 7**	ADJUSTMENT / #
[8]	SLANT POLE ARM ASSY	T		(P8)	**NOTE 8**	ADJUSTMENT
[9]	TU ARM ASSY	T		(L9)	**NOTE 9**	ADJUSTMENT
[10]	SWING ARM ASSY	T		(S10)	**NOTE 10**	ADJUSTMENT
[11]	SLIDE DECK ASSY	T	Fig.2-1-18	2(S11a),(S11b),2(L11a), 2(L11b),(L11c)	**NOTE 11a,b**	ADJUSTMENT / #
[12]	PAD ARM ASSY	T	Fig.2-1-19	(P12),(L12),(W12)	**NOTE 12**	ADJUSTMENT / #
[13]	-	-		-	-	
[14]	TU BRAKE ASSY	T		(P14),(L14),(W14)	**NOTE 14**	ADJUSTMENT
[15]	TENSION CTL LEVER ASSY	T	Fig.2-1-20	(W15)	**NOTE 15**	ADJUSTMENT
[16]	CENTER GEAR	T		-	**NOTE 16**	
[17]	PINCH ROLLER ARM F. ASSY	T		(W17)	**NOTE 17**	ADJUSTMENT
[18]	TENSION CTL PLATE ASSY	T		-	**NOTE 18**	ADJUSTMENT
[19]	BRAKE CTL LEVER ASSY	T		-	**NOTE 19**	ADJUSTMENT
[20]	MOTOR BRACKET ASSY	T	Fig.2-1-21	3(S20),(L20a),2(L20b)	**NOTE 20**	ADJUSTMENT
[21]	GUIDE RAIL ASSY	T		2(W21),(S21),2(L21a),(L21b)	**NOTE 21**	ADJUSTMENT
[22]	SLIDE LEVER 2 ASSY	T		-	**NOTE 22**	ADJUSTMENT / #
[23]	LOADING PLATE ASSY	T		(W23)	**NOTE 23**	ADJUSTMENT
[24]	MODE GEAR	T		-	**NOTE 24**	
[25]	EJECT LEVER	T		(W25)	**NOTE 25**	ADJUSTMENT
[26]	BASE R ASSY	T	Fig.2-1-22	(S26a),(S26b),2(L26)	**NOTE 26**	ADJUSTMENT
[27]	ROTARY ENCODER	T		2(S27)	**NOTE 27**	PHASE ADJUSTMENT
[28]	GEAR COVER ASSY	T		(S28a),2(S28b)	-	
[29]	MAIN CAM ASSY	T		-	**NOTE 29**	PHASE ADJUSTMENT
[30]	SLIDE ARM ASSY	T	Fig.2-1-23	-	**NOTE 30**	ADJUSTMENT
[31]	CONNECT GEAR 2	T		-	**NOTE 31**	
[32]	SUB CAM ASSY	T		(S32)	**NOTE 32**	PHASE ADJUSTMENT
[33]	CONTROL ARM ASSY	T		-	**NOTE 33**	ADJUSTMENT
[34]	REEL GEAR 1	T		-	**NOTE 34**	
[35] / [36]	DRUM BASE ASSY/ CAPSTAN MOTOR	T	Fig.2-1-24	3(S35)	**NOTE 35a,b**	ADJUSTMENT
[36]	CAPSTAN MOTOR	T		(S36)	**NOTE 36**	ADJUSTMENT
[37]	MAIN DECK ASSY	T		-	-	

Fig.2-1-10


2
(S1)
[1]
1
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4
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(W5b)
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(S21)
[17]
[18]
[30]
[34]
[21]
[24]
20
(S26b)
(W15)
23
(S28a)
25
(S28b)
[16]
(W25)
24
(S28b)
[19]
[25]
[15]
19
(S26a)
[28]
26
(S32)
[29]
[37]
[26]
[32]
[31]
[33]

Fig.2-1-11

< TOP VIEW >

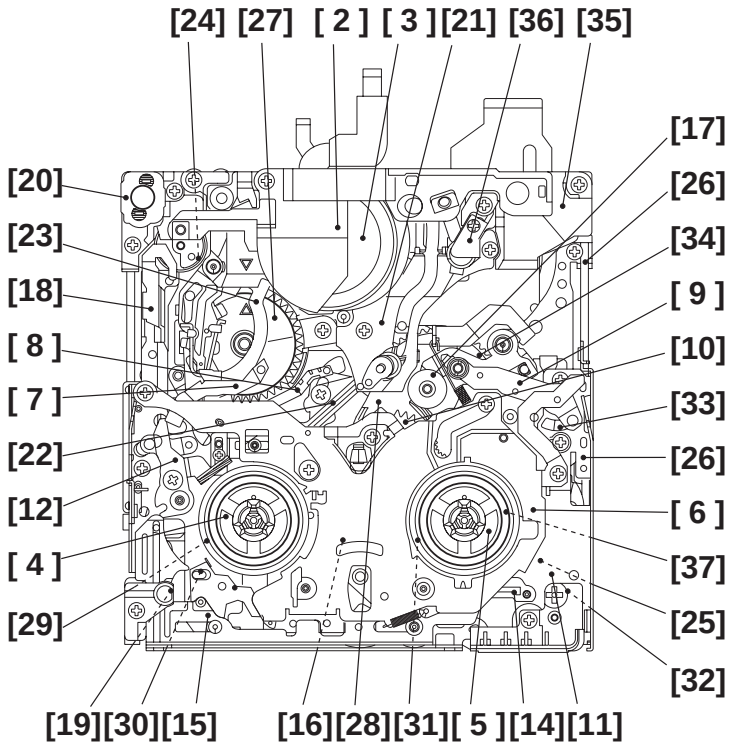


Fig.2-1-12

< BOTTOM VIEW >

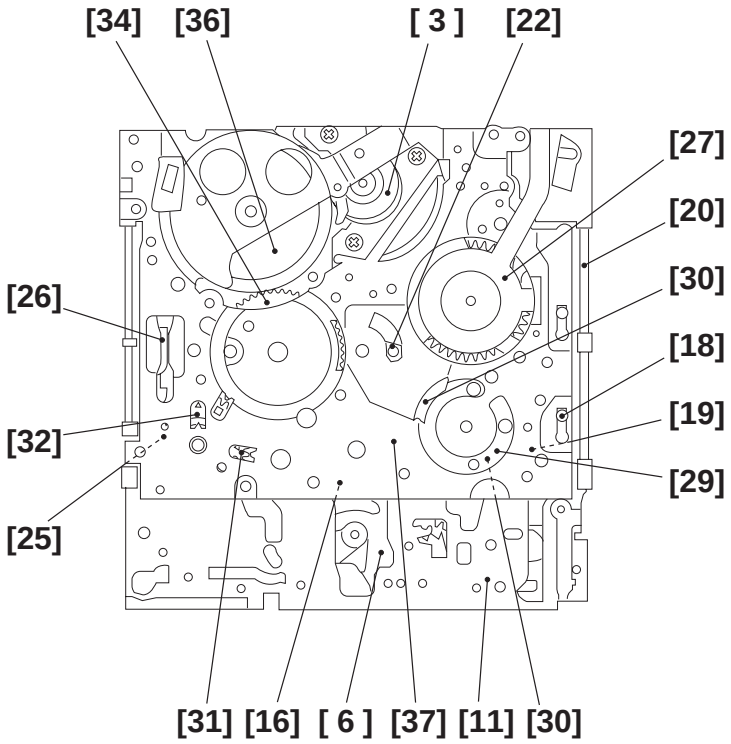


Fig.2-1-13

2.1.5 DISASSEMBLY/ASSEMBLY

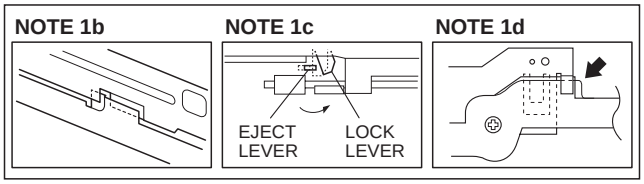
2.1.5.1 [1] CASSETTE HOUSING ASSY

NOTE 1a:
Be careful not to damage any of the parts during work.

NOTE 1b:
Special care is required in mounting.

NOTE 1c:
When mounting, the CASSETTE HOUSING ASSY should be attached in the Eject status. Pay heed to the positions of the LOCK LEVER and EJECT LEVER during mounting.

NOTE 1d:
When mounting, be sure to locate the FPC in the gap.



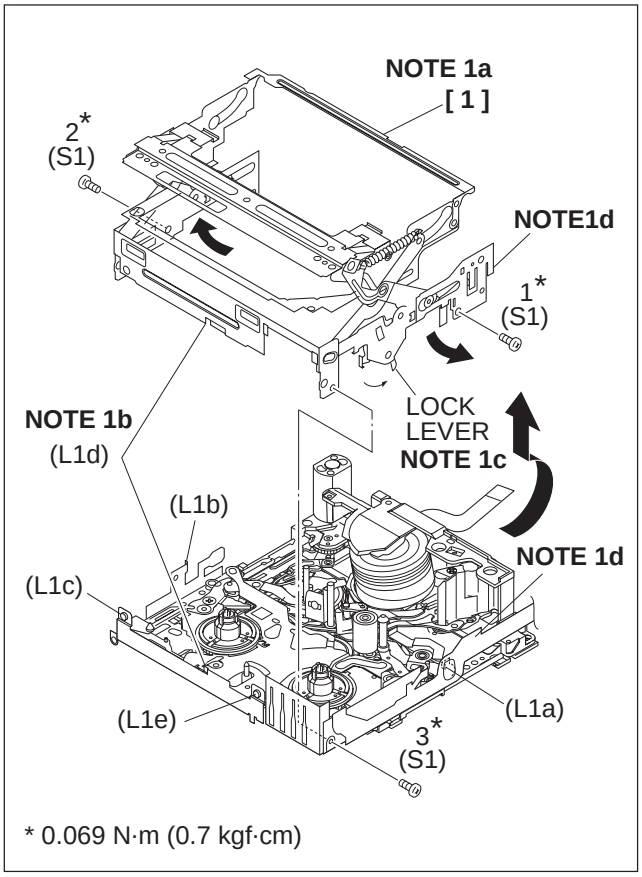


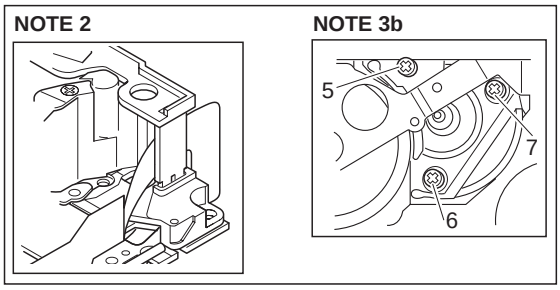
Fig.2-1-14

2.1.5.2 [2] UPPER BASE ASSY
[3] DRUM ASSY

NOTE 2:
When mounting, be sure to insert the FPC reinforcing sheet.

NOTE 3a:
Be mindful of scratches or damage during work.

NOTE 3b:
Be careful not to attach screws incorrectly.



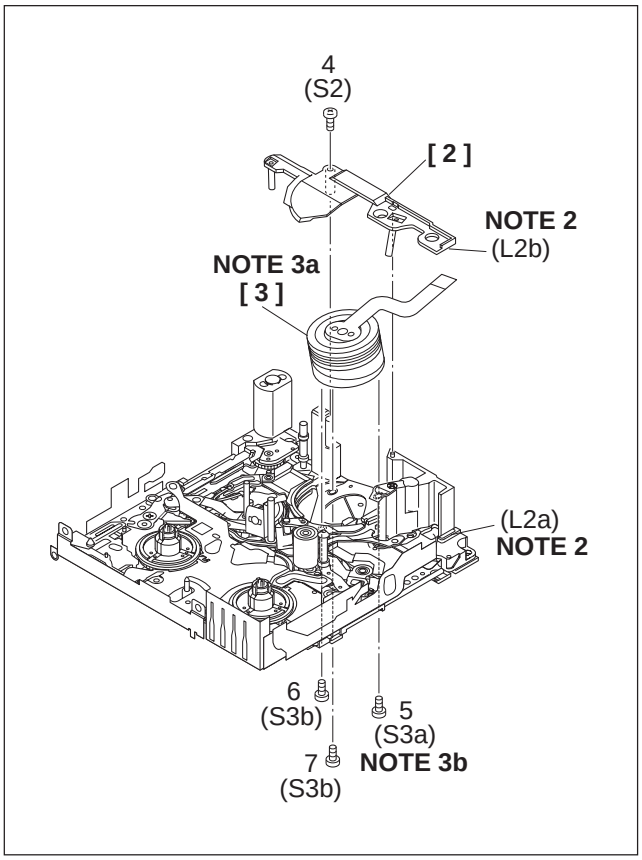


Fig.2-1-15

2.1.5.3 [4] REEL DISK ASSY(SUP)
[5] REEL DISK ASSY(TU)
[6] REEL COVER ASSY

NOTE 4:

Be careful not to attach the REEL DISK wrongly. The Supply side can be identified by the white color at the center.

NOTE 5a:

Be careful not to attach the REEL DISK wrongly. The Take-up side can be identified by the black color at the center.

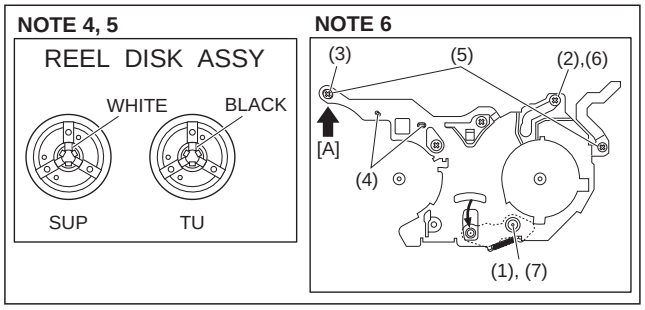
NOTE 5b

The washer is inserted under the REEL DISK.
Be carefull not to lose the washer.
Two washers are inserted under the REEL DISK in some products manufactured earlier, but one washer is inserted in the products manufactured recently and in the future.
See the parts list, and use the parts written in the parts list.

NOTE 6:

Perform the following steps for mounting.

(1) Align the hole with the pin.
(2) Attach the **[17]** PINCH ROLLER ARM FINAL ASSY by aligning the positions.
(3) Attach the SLIDE DECK ASSY (POINT[A]) by aligning the positions.
(4) Check that the parts below them are located in the correct positions.
(5) Tighten the 2 screws.
(6) Tighten the screw.
(7) Attach the 1 SLIT WASHER parts.



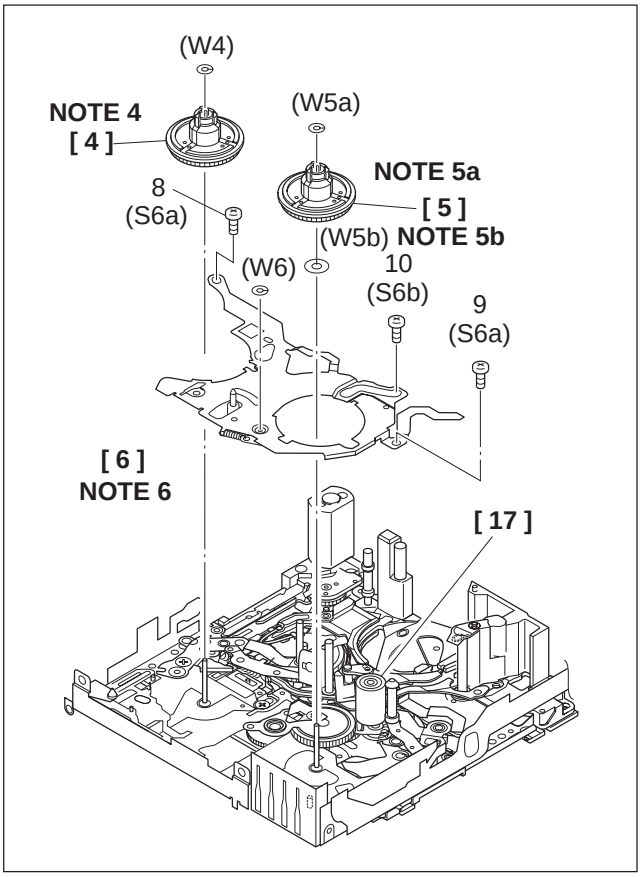


Fig.2-1-16

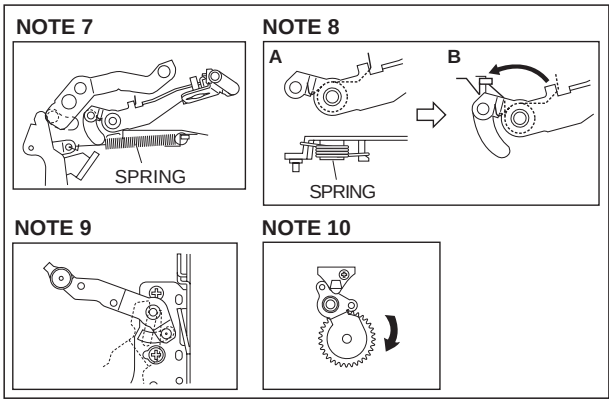
2.1.5.4 [7] TENSION ARM ASSY
[8] SLANT POLE ARM ASSY
[9] TU ARM ASSY
[10] SWING ARM ASSY

NOTE 7:
When detaching, remove the spring of the **[12]** PAD ARM ASSY in advance.
Pay attention to the attachment position.

NOTE 8:
When mounting the SLANT POLE ARM ASSY, hook the spring onto the lug as in diagram A, and fit the combination onto the SLIDE DECK ASSY. After fitting, hook the spring onto the lug of the SLIDE DECK ASSY as in diagram B.
Be careful not to lose the spring.

NOTE 9:
Pay attention to the attachment position.

NOTE 10:
When detaching, remove the screw then remove the SWING ARM ASSY by pulling it up and turning it.



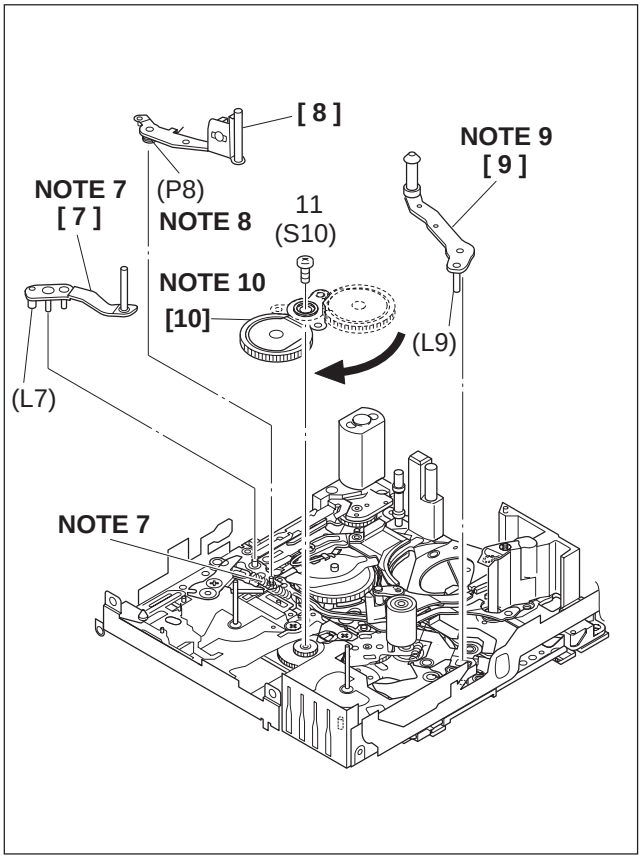


Fig.2-1-17

2.1.5.5 [11] SLIDE DECK ASSY

NOTE 11a:

Each of the parts on the SLIDE DECK ASSY can be replaced separately.

When detaching the assembly, if there is no need to replace any of its parts, remove the SLIDE DECK ASSY as it is.

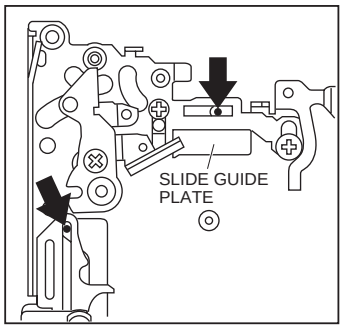
NOTE 11b:

When mounting, pay attention to the positions of the **[22]** SLIDE LEVER 2 ASSY studs and the **[19]** BRAKE CTL LEVER ASSY.

When mounting, position the CONTROL PLATE on the left side.

Pay attention to the position of the SLIDE GUIDE PLATE during mounting.

NOTE 11b



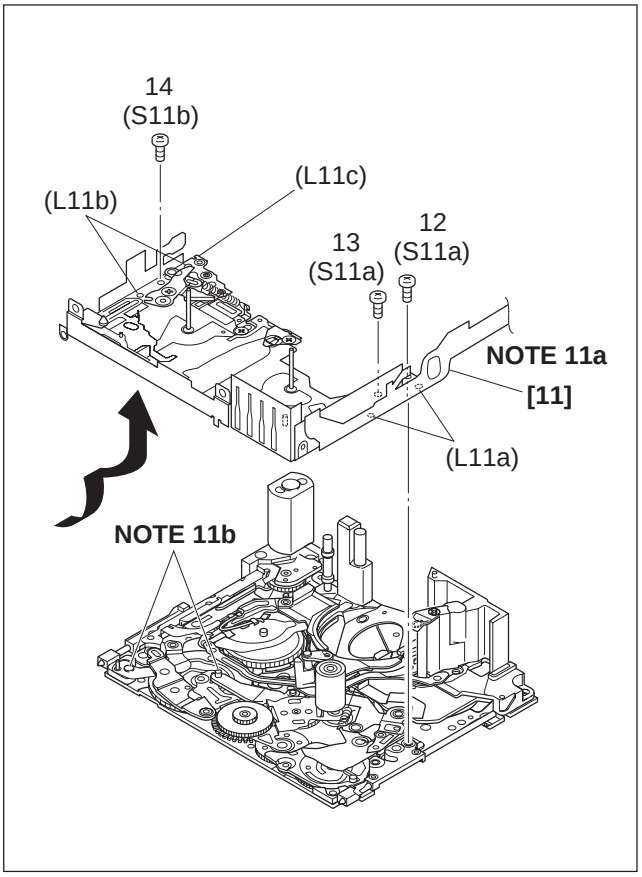


Fig.2-1-18

2.1.5.6 [12] PAD ARM ASSY
[13] -
[14] TU BRAKE ASSY

NOTE 12:

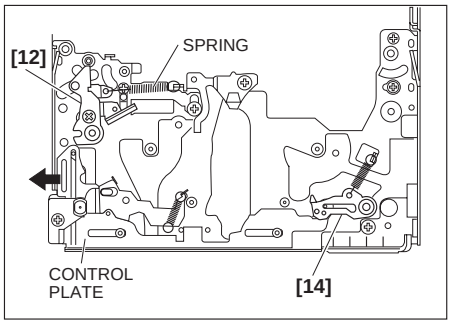
The spring may have already been disengaged when the **[8]** SLANT POLE ARM ASSY was removed.

NOTES 14:

When mounting, pay attention to the correct positioning.

Mount the CONTROL PLATE by moving it fully toward the left side.

NOTE 12,14



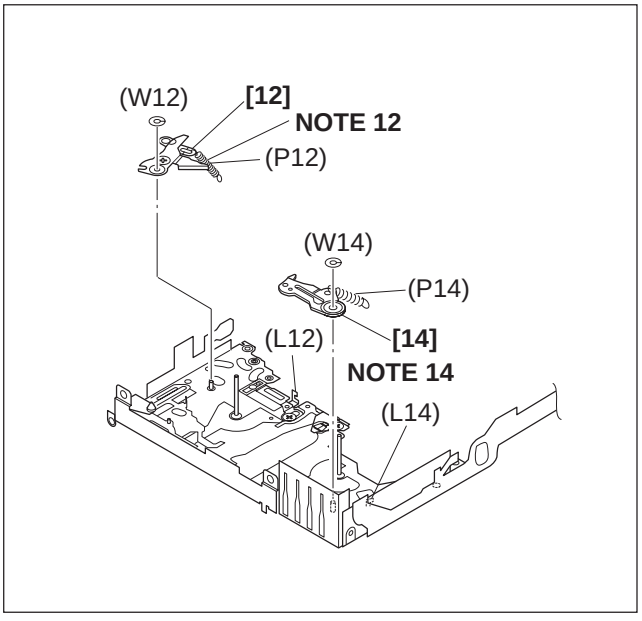


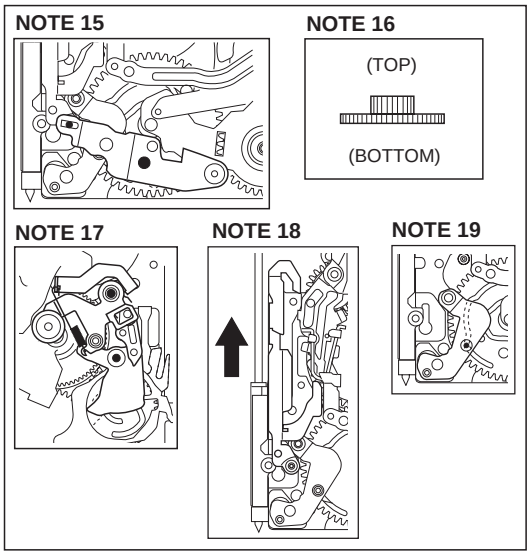
Fig.2-1-19

2.1.5.7 [15] TENSION CTL LEVER ASSY
[16] CENTER GEAR
[17] PINCH ROLLER ARM FINAL ASSY
[18] TENSION CTL PLATE ASSY
[19] BRAKE CTL LEVER ASSY

NOTES 15/16:
When mounting, pay attention to the correct positioning.

NOTE 17:
Take care against grease attachment during work.

NOTES 18/19:
When mounting, pay attention to the correct positioning.



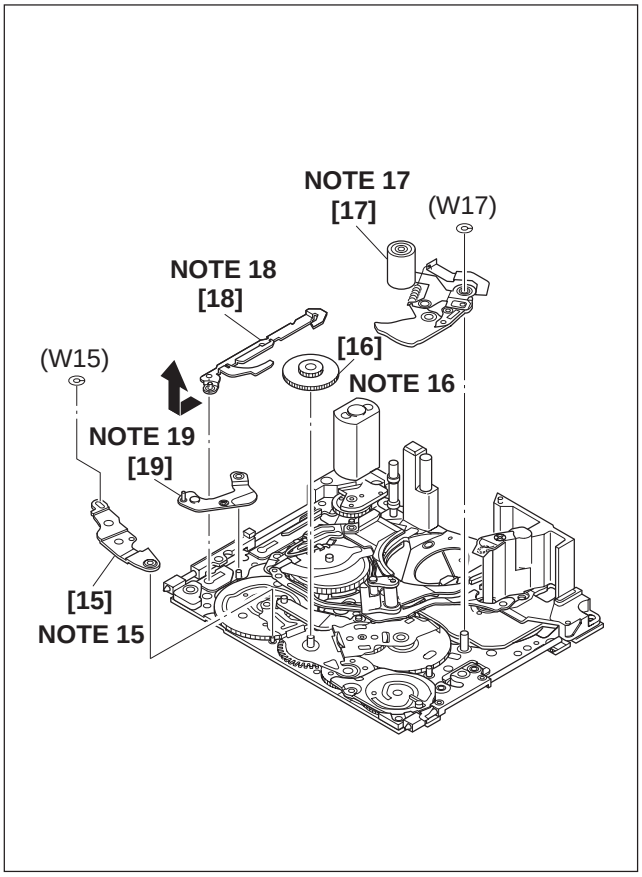


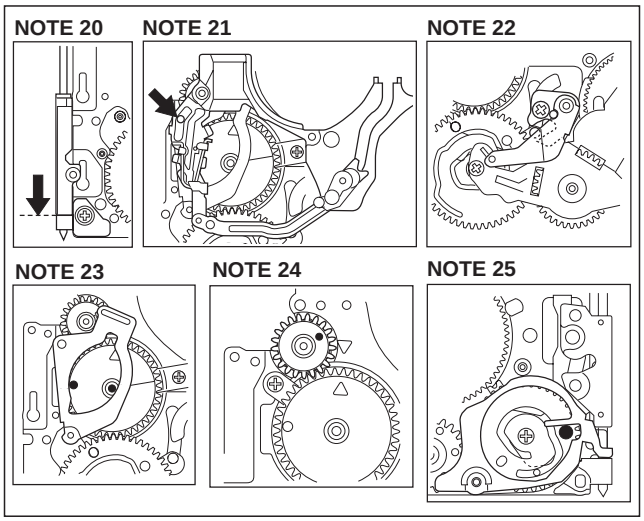
Fig.2-1-20

2.1.5.8 [20] MOTOR BRACKET ASSY
[21] GUIDE RAIL ASSY
[22] SLIDE LEVER 2 ASSY
[23] LOADING PLATE ASSY
[24] MODE GEAR
[25] EJECT LEVER

NOTE 20:
When mounting, pay attention to the positioning of the sliding parts.

NOTE 21:
When mounting, take care that no part is allowed to float or rattle.

NOTES 22/23/24/25:
When mounting, pay attention to the correct positioning.



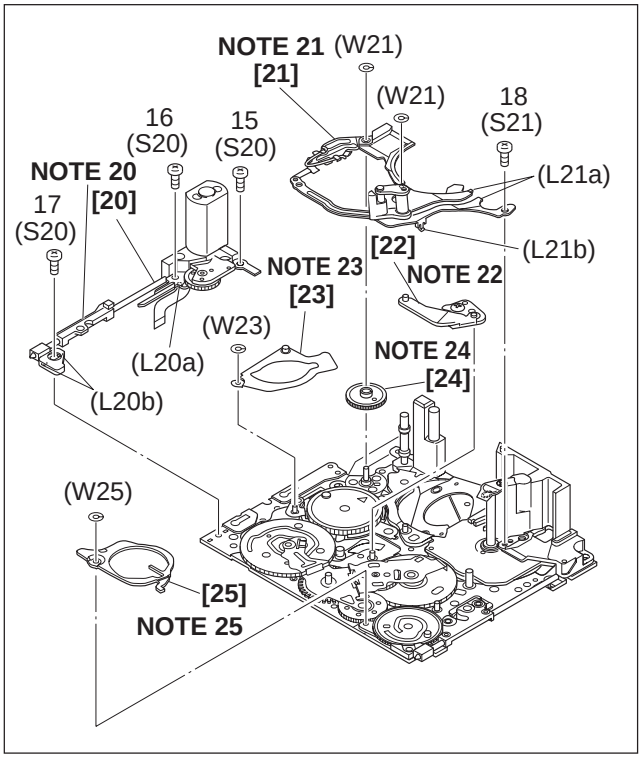


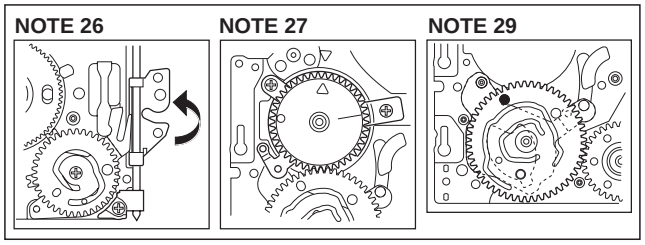
Fig.2-1-21

2.1.5.9 [26] BASE R ASSY
[27] ROTARY ENCODER
[28] GEAR COVER ASSY
[29] MAIN CAM ASSY

NOTE 26:
When mounting, fold the sliding part to the inner side.

NOTE 27:
When mounting, pay attention to the correct positioning and the FPC layout.

NOTE 29:
When mounting, pay attention to the correct positioning.



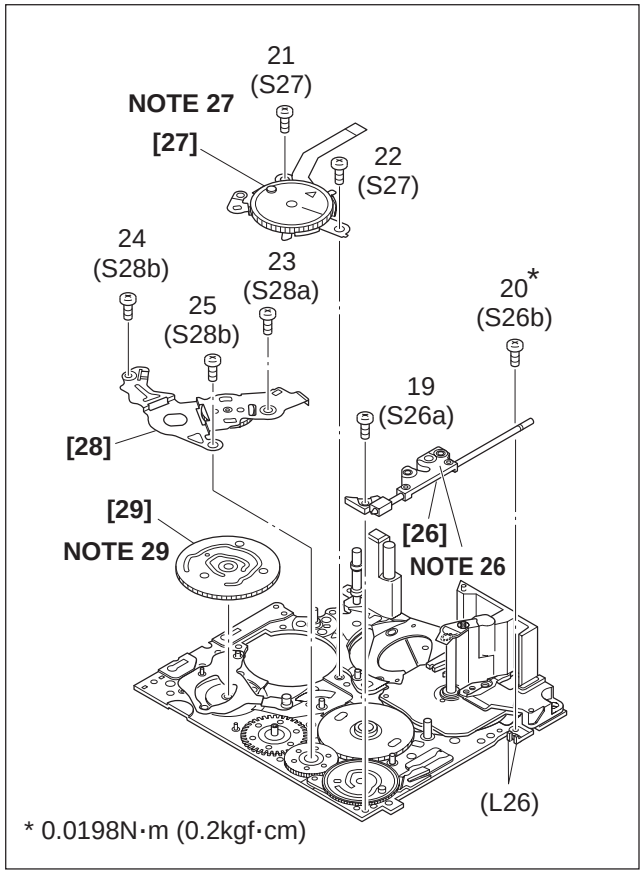


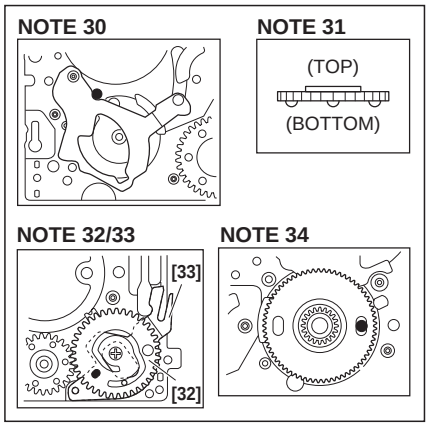
Fig.2-1-22

2.1.5.10 [30] SLIDE ARM ASSY
[31] CONNECT GEAR 2
[32] SUB CAM ASSY
[33] CONTROL ARM ASSY
[34] REEL GEAR 1

NOTE 30:
When mounting, pay attention to the correct positioning.

NOTE 31:
When mounting, pay attention to the position of the front and back.

NOTES 32/33/34:
When mounting, pay attention to the correct positioning.



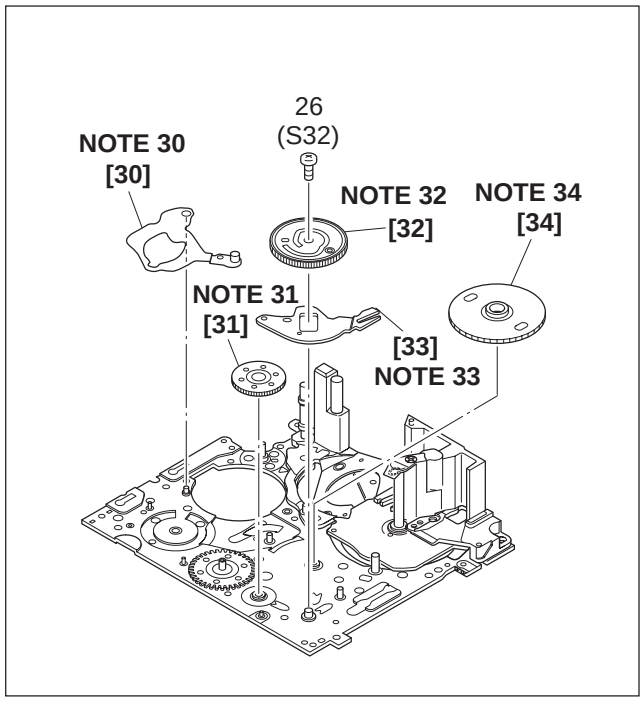


Fig.2-1-23

2.1.5.11 [35] DRUM BASE ASSY
[36] CAPSTAN MOTOR
[37] MAIN DECK ASSY

NOTES 35a/36:

Since [36]CAPSTAN MOTOR is attached to [35]DRUM BASE ASSY, remove [36]CAPSTAN MOTOR together with [35]DRUM BASE ASSY when removing [36]CAPSTAN MOTOR.

[36]CAPSTAN MOTOR should not be separated from [35]DRUM BASE ASSY except when replacing them.

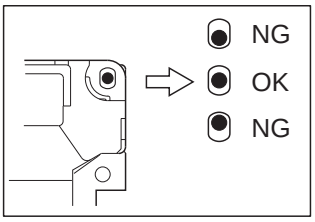
NOTE 35b:

It is very important to attach [35]DRUM BASE ASSY to the proper position.

Especially, improper engagement of [36]CAPSTAN MOTOR with [34]REEL GEAR 1 causes operational defection or abnormal sound. Therefore, confirm the attachment position before disassembly procedure.

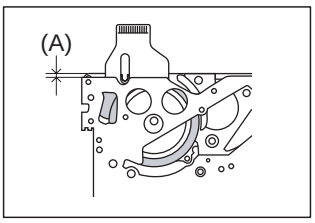
See the following figure as for the proper attachment position.

NOTE 35b



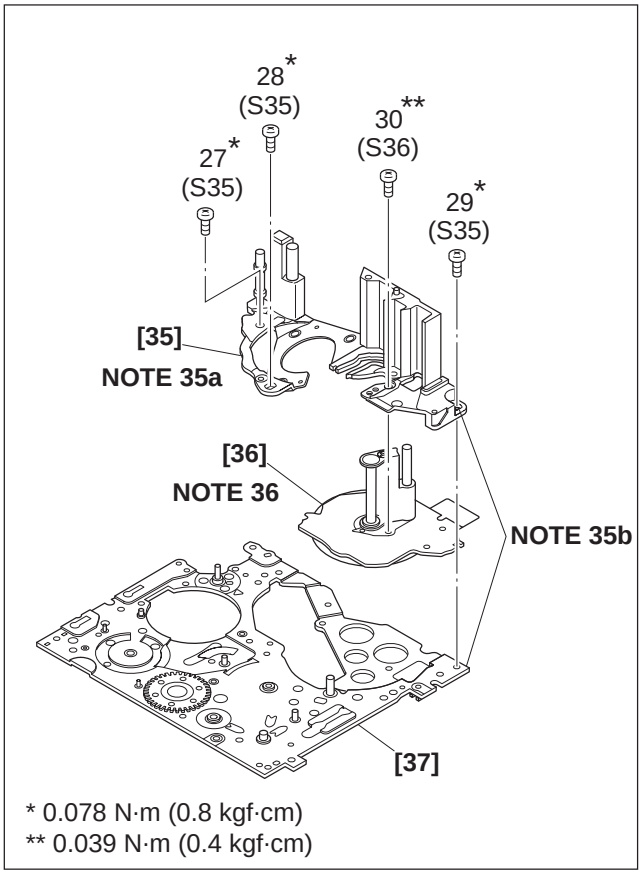
When [35]DRUM BASE ASSY is properly attached, the screw hole tends to be located at the center of the oval.

When the screw hole is located far from the center of the oval, operational defection or abnormal sound may occur.



Before removing [35]DRUM BASE ASSY, confirm the position of [35]DRUM BASE ASSY by seeing the length (A), as shown in the left figure.

When reattaching [35]DRUM BASE ASSY, confirm the position to reattach [35]DRUM BASE ASSY by seeing the length (A). Be sure to reattach [35]DRUM BASE ASSY to the same position as it has been before the removing procedure.



* 0.078 N·m (0.8 kgf·cm)
** 0.039 N·m (0.4 kgf·cm)

Fig.2-1-24

2.1.6 CHECKUP AND ADJUSTMENT OF MECHANISM PHASE

[24]MODE GEAR

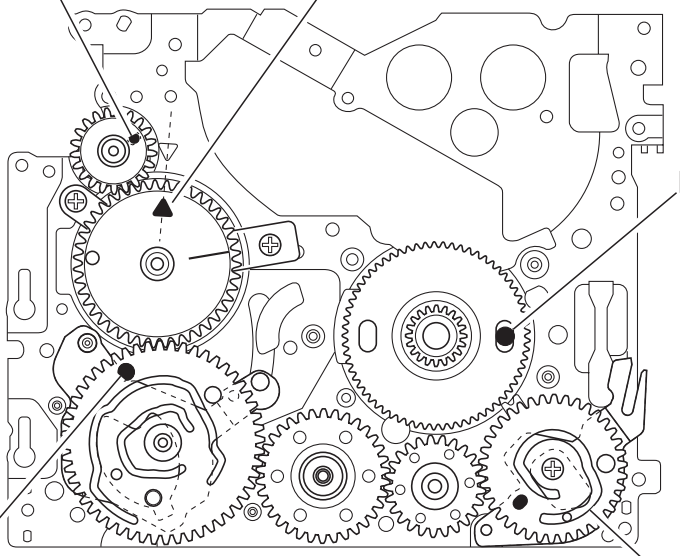
Align the MODE GEAR with the Main Deck Assembly hole.

Note:
The MODE GEAR may be displaced during the mechanism operation, however it can be checked from the rear and realigned during manual assembly.

[27]ROTARY ENCODER

Mount the ROTARY ENCODER by aligning its mark (△) and the mark (▽) of the Main Deck Assembly.

Note:
Be careful when handling the FPC during mounting.



[34]REEL GEAR 1

Align the REEL GEAR 1 with the Main Deck Assembly hole.

Note:
The REEL GEAR 1 may be displaced during mechanism operation, however this can be checked from the rear and realigned during manual assembly.

[29]MAIN CAM ASSY/[30]SLIDE ARM ASSY

When mounting the SLIDE ARM ASSY align it with the Main Deck Assembly and MAIN CAM ASSY holes.

Note:
During the mounting procedure, make sure that the[32] SUB CAM ASSY is in the correct mounting position.

[32]SUB CAM ASSY/[33] CONTROL ARM ASSY

Mount the SUB CAM ASSY hole to align with the CONTROL ARM ASSY and Main Deck Assembly holes and then tighten them all together with a screw.

Note:
When mounting it, make sure that the[29]MAIN CAM ASSY is in the correct mounting position.

Fig.2-1-25

2.1.7 MECHANISM ADJUSTMENTS

2.1.7.1 Adjustment of the slide guide plate

Use Fig. 2-1-26 as the reference unless otherwise specified.

(1) Set the PLAY mode. See Fig. 2-1-8.
(2) Loosen the screws (**A**, **B**).
(3) With the Main Deck and Slide Deck Assemblies pushed into the unit, tighten the screws (**A**, **B**) while applying pressure to the stud (shaft) on the Slide Guide plate.
The pressure applied should be enough to enable utilization of the rebounding force of the springs.
The tightening torque should be 0.069 N•m (0.7 kgf•cm).
(4) Check the operation.
Repeat unloading and loading several times and make sure that these operations can be performed smoothly without producing rattles.

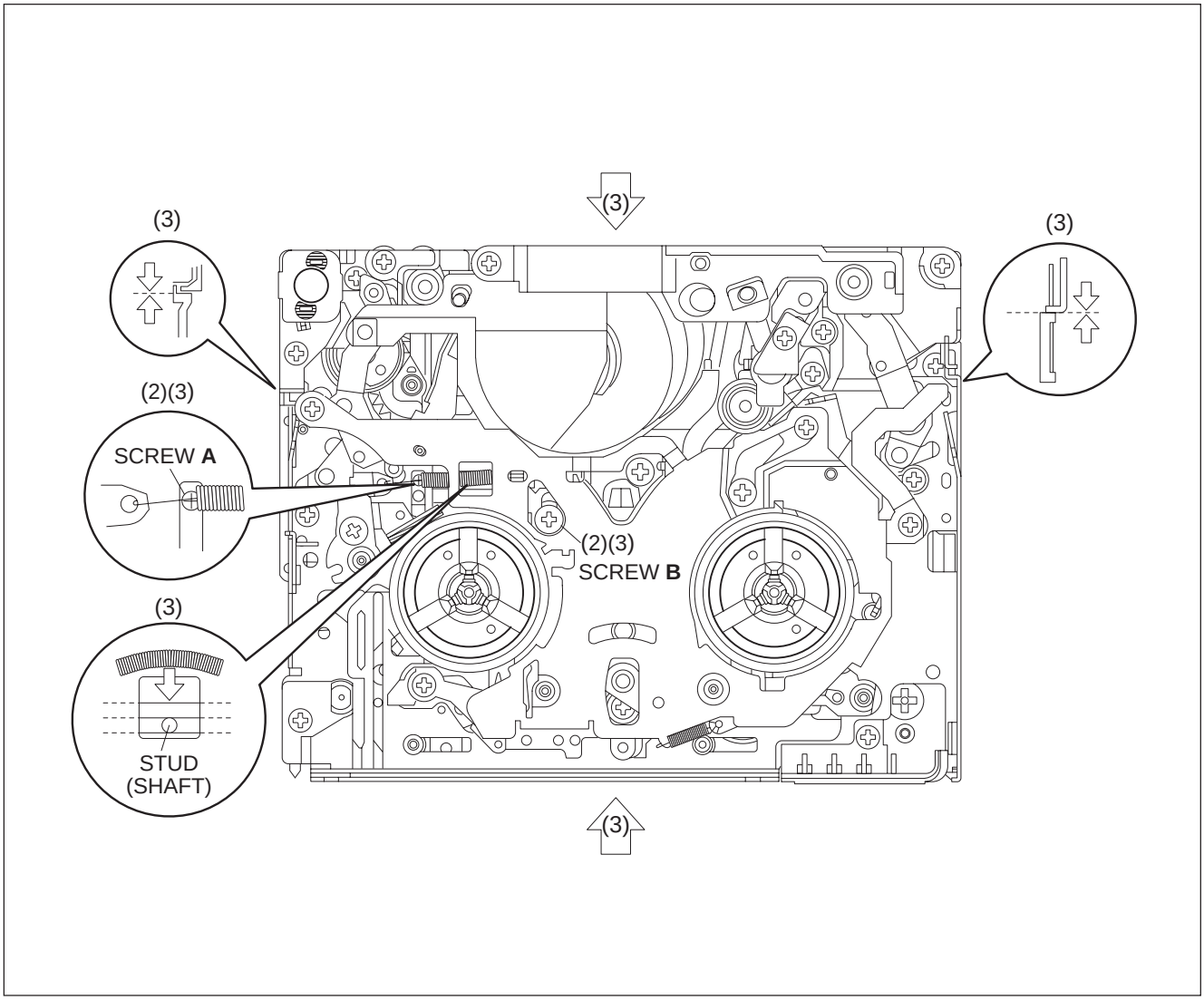


Fig.2-1-26

2.1.7.2 Adjustment of the Tension Arm and Pad Arm Assemblies

Use Fig. 2-1-27 as the reference unless otherwise specified.

(1) Set the PLAY mode.
See Fig. 2-1-8.
(2) Loosen the screw **A**.
(3) With the take-up side at the bottom, align the extreme end of the Tension Arm Assembly with the crossed grooves on the screw **B** that retains the Loading Motor Assembly and then tighten the screw **A**.
The tightening torque should be 0.069 N•m (0.7 kgf•cm).
(4) Check the operation.
Repeat unloading and loading several times and make sure that the Tension Arm Assembly is located within the normal range.

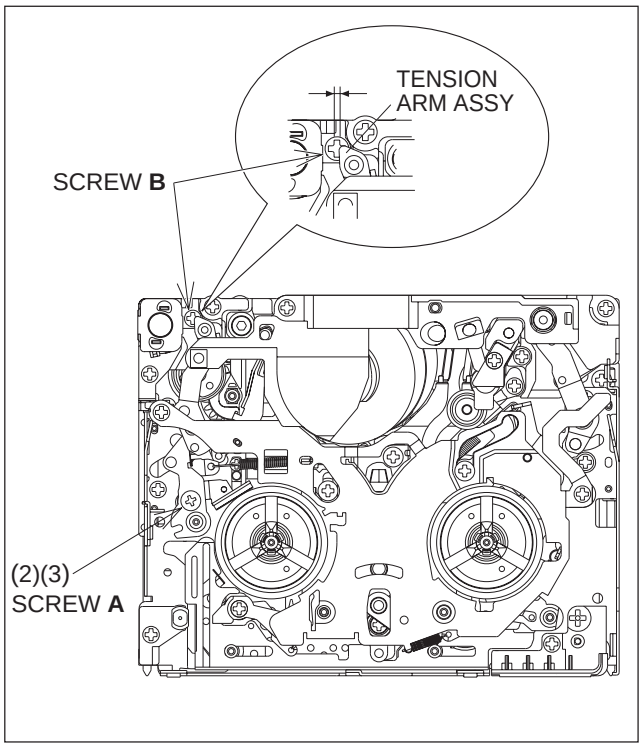


Fig.2-1-27

2.1.7.3 Adjustment of the Slide Lever 2

Use Fig. 2-1-28 as the reference unless otherwise specified.

(1) Set the C IN mode.
See Fig. 2-1-4.
(2) Loosen the screw **A**.
(3) Set the Main Deck and Slide Deck Assemblies apart so that they do not rattle, then tighten the screw **A** by screwing it fully toward the Drum Assembly.
The tightening torque should be 0.069 N•m (0.7 kgf•cm).
(4) Check the operation.
Repeat unloading and loading several times and make sure that these operations can be performed smoothly without producing rattles.

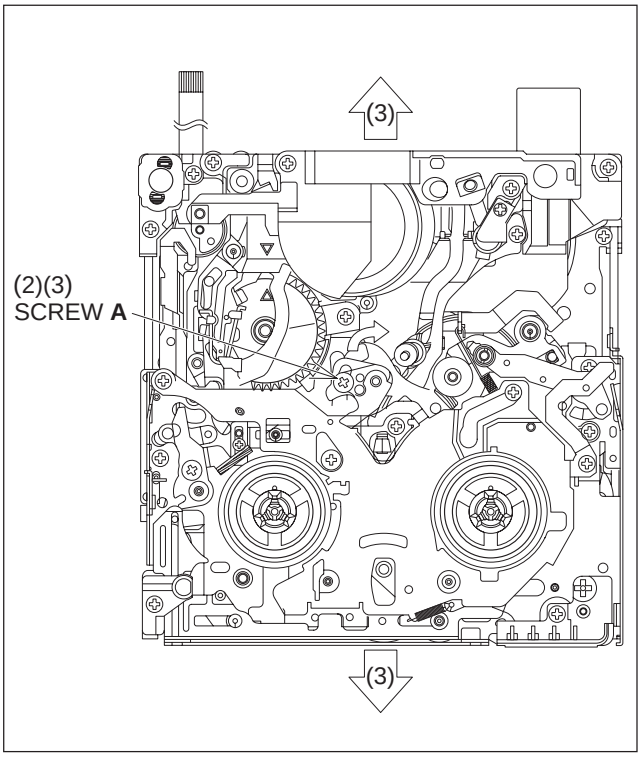


Fig.2-1-28

2.1.8 SERVICE NOTE

Use the following chart to manage mechanism parts that are removed for disassembling the mechanism.

Fig.2-1-14

[1] CASSETTE HOUSING ASSY

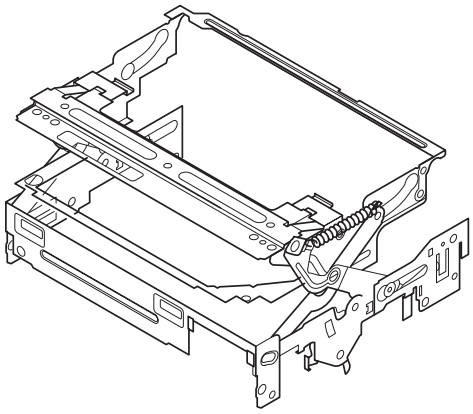


Fig.2-1-15

[2] UPPER BASE ASSY

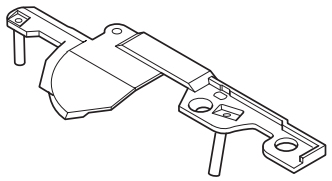


Fig.2-1-15

[3] DRUM ASSY

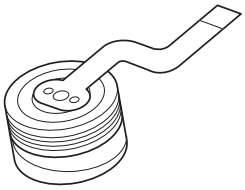
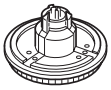
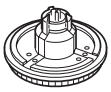


Fig.2-1-16

[4] REEL DISK ASSY(SUP)



[5] REEL DISK ASSY(TU)



[6] REEL COVER ASSY

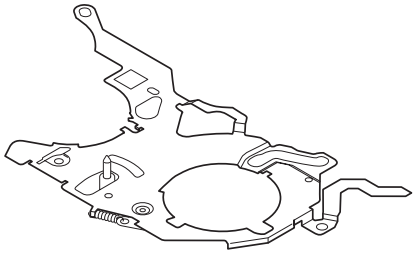
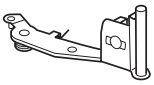


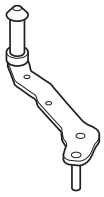
Fig.2-1-17

[7] TENSION ARM ASSY

[8] SLANT POLE ARM ASSY



[9] TU ARM ASSY



[10] SWING ARM ASSY

Fig.2-1-18

[11] SLIDE DECK ASSY

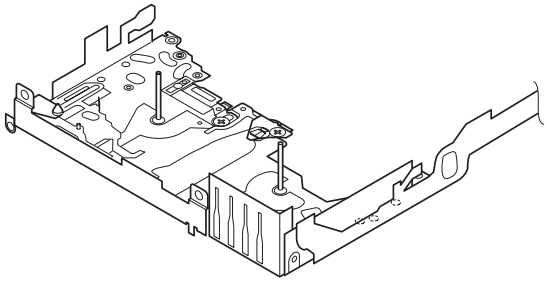


Fig.2-1-19

[12] PAD ARM ASSY

[13]

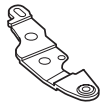
—

[14] TU BRAKE ASSY

Fig.2-1-29

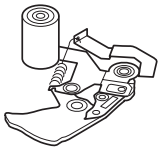
Fig.2-1-20

[15] TENSION CTL LEVER ASSY

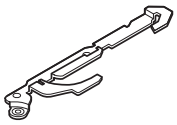


[16] CENTER GEAR

[17] PINCH ROLLER ARM F. ASSY



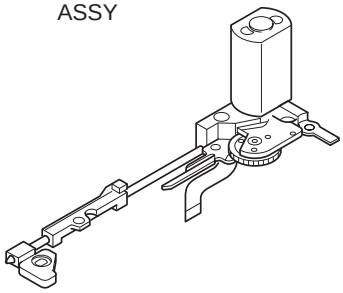
[18] TENSION CTL PLATE ASSY



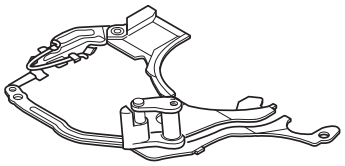
[19] BRAKE CTL LEVER ASSY

Fig.2-1-21

[20] MOTOR BRACKET ASSY



[21] GUIDE RAIL ASSY



[22] SLIDE LEVER 2 ASSY

[23] LOADING PLATE ASSY

[24] MODE GEAR

[25] EJECT LEVER

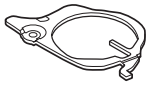
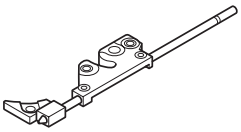
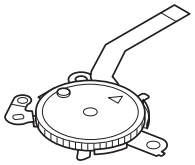


Fig.2-1-22

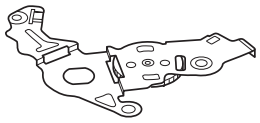
[26] BASE R ASSY



[27] ROTARY ENCODER



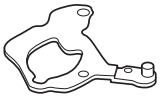
[28] GEAR COVER ASSY



[29] MAIN CAM ASSY

Fig.2-1-23

[30] SLIDE ARM ASSY



[31] CONNECT GEAR 2

[32] SUB CAM ASSY

[33] CONTROL ARM ASSY

[34] REEL GEAR 1

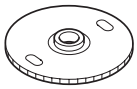
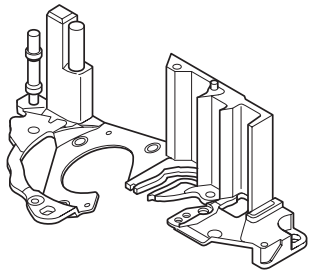
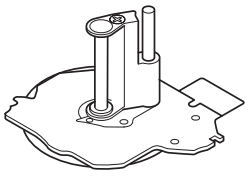


Fig.2-1-24

[35] DRUM BASE ASSY



[36] CAPSTAN MOTOR



[37] MAIN DECK ASSY

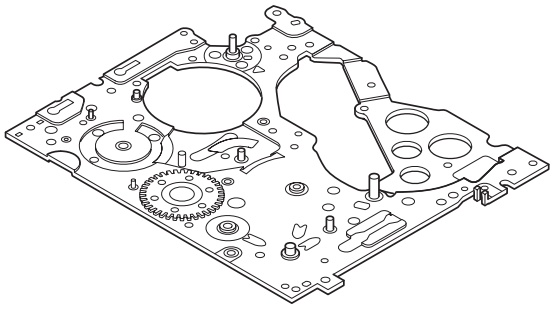


Fig.2-1-30

2.1.9 SERVICE NOTE

Use the following chart to manage screws.

Symbol No.	[1]			[2]	[3]			[6]			[10]	[11]			[20]			[21]	[22]	
Removing order of screw	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
Place to stick screw																				
Reference drawing (Fig. No.2-1-**)	14				15				16		17		18			21			22	
Screw tightening torque	Ⅰ				Ⅱ															Ⅲ

Symbol No.	[27]			[28]			[32]	[35]			[36]
Removing order of screw	21	22	23	24	25	26	27	28	29	30	
Place to stick screw											
Reference drawing (Fig. No.2-1-**)	22					23	24				
Screw tightening torque	Ⅱ						Ⅳ			Ⅴ	

<NOTE>

·Pay careful attention to tightening torque for each screw.

Ⅰ : 0.069N·m(0.7kgf·cm)　　Ⅱ : 0.055N·m(0.56kgf·cm)　　Ⅲ : 0.0198N·m(0.2kgf·cm)

Ⅳ : 0.078N·m(0.8kgf·cm)　　Ⅴ : 0.039N·m(0.4kgf·cm)

Fig.2-1-31

2.1.10 REMARKS

2.1.10.1 Cleaning

(1) For cleaning of the upper drum (particularly video heads), use fine-woven cotton cloth with alcohol soaks through. Do not move the cloth but turn the upper drum counterclockwise.

NOTE:
Make sure not to move the cloth in the vertical direction to the video head, since it may cause damage of the video heads.

(2) For cleaning of parts of the tape transport system except the upper drum, use fine-woven cotton cloth or cotton swab soaked alcohol.

(3) After cleaning, confirm that the cleaned parts are completely dry before loading the deck with cassette tape.

2.1.10.2 Applying oil and grease

(1) Periodical oiling and greasing are not required but should be done to new parts when replacing. If oil and grease on the other parts of the other party are old and dirty, wipe them clean and apply new oil or grease.

(2) For parts and points to apply oil and grease, refer to the exploded view of the 3.1 DVC MECHANISM ASSEMBLY. Fig.2-1-32 specifies oil and grease to be used.

(3) When oiling, clean the objective parts with alcohol first and apply one or two drop(s) of oil. Too much oiling causes rotary parts to slip because of oil leakage.

Classification	Part No.	Symbol in drawing
Grease	KYODO-SH-JB	AA
Oil	YTU94027	BB
Grease (HANARL)	RX-410R	CC

specifies oil and grease to be used

Fig.2-1-32

2.2 VHS-C MECHANISM

2.2.1 Precautions

(1) When fastening parts, pay careful attention to the tightening torque of each screw. Unless otherwise specified, tighten a screw with the torque of 0.216 N•m (2.2 kgf•cm). Torque setting value of torque driver is limited. At the values over the maximum torque setting value, fasten a screw manually not to damage the screw thread.
(2) Be sure to disconnect the set from the power supply before fastening and soldering parts.
(3) When disconnecting/connecting wires, be careful not to get them and their connectors damaged.
(4) When replacing parts, be very careful neither to damage other parts nor to fit wrong parts by mistake.

Example

STEP/LOC. No.	PART NAME		FIG.	REMOVAL POINT	INSTALLATION ADJUSTMENT CONDITION NOTE
[1]	ROLLER BASE ASSEMBLY	T	M1	(S1)	–
[2]	TENSION ARM ASSEMBLY	T	M1	(P1), (W1a)	–
[3]	REEL DISC (SUP)	T	M1	(W1a), (W1b)	–
↑ *1	↑ *2	↑ *3	↑ *4	↑ *5	↑ *6

2.2.2 How to read the disassembly and assembly

*1 Order of steps in Procedure
When reassembling, perform the step(s) in the reverse order. These numbers are also used as the identification (location) No. of parts Figures.
*2 Part to Name be removed or installed.
*3 Location of part.

T = The Upper side
B = The Lower side

*4 Fig. No. showing Procedure or Part Location.
M = Mechanism
*5 Identification of part to be removed, unhooked, unlocked, released, unplugged, unclamped or unsoldered.

P = Spring
W = Washer
S = Screw
* = Unhook, unlock, release, unplug or unsolder.

Example

- Remove (W1)=Washer W1.
- Remove the solder at (SD1)=Point SD1.
- Disconnect A = Connector A.

*6 Adjustment information for installation.
(+) = Refer to Exploded Views for Lubrication information.

2.2.3 DISASSEMBLY/ASSEMBLY PROCEDRURE TABLE

This procedure starts with the condition that the cabinet parts and deck parts. Also, all the following procedures for adjustment and parts replacement should be performed in STOP mode. When reassembling, perform the step(s) in the reverse order.

STEP/LOC. No.	PART NAME		FIG.	REMOVAL POINT	INSTALLATION ADJUSTMENT CONDITION NOTE
[1]	ROLLER BASE ASSY	T	M1	(1)	–
[2]	TENSION ARM ASSY	T	M1	(P1), (W1a)	–
[3]	REEL DISC	T	M1	(W1a), (W1b)	–
[4]	SLANT ARM ASSY	T	M1	(W1a)	–
[5]	CANCEL LEVER ASSY	T	M2	(W2)	–
[6]	EJECT LEVER ASSY	T	M2	(W2)	–
[7]	CASSETTE GUIDE (LEFT)	T	M2	(2)	–
[8]	SUPPLY CLUTCH ASSY	T	M2	(W2)	–
[9]	WHEEL GEAR	T	M2	(W2)	See, Adjustment procedure for Section 2.2.5
[10]	ROTARY ENCODER	B	M3	4(S3a)	The function of this part varies according to the ASSY (VHS/SVHS) which this part is rporated in. (Refer to fig. 2-2-6)
[11]	TIMING BELT	B	M3	–	–
[12]	CENTER PULLEY UNIT	T/B	M3	2(S3a)	–
[13]	CASSETTE GUIDE (R) ASSY	T	M3	(S3b), (P3)	(Only use SVHS model)
[14]	TAKE UP GEAR	T	M3	(W3a)	–
[15]	BRAKE SUB GEAR	T	M3	(W3a)	–
[16]	PINCH ROLLER ARM ASSY	T	M3	(W3b)	–
[17]	TAKE UP GUIDE ARM ASSY	T	M3	(W3a)	–
[18]	LINK ARM ASSY	T	M4	(W4)	–
[19]	LED GUIDE	T	M4	(S4a)	–
[20]	A/C HEAD UNIT	T	M4	2(S4b)	–
[21]	SLANT POLE BASE ASSY	T	M5	(S5a)	–
[22]	CAPSTAN MOTOR	T	M5	3(S5a)	–
[23]	MOTOR BASE	T	M5	2(S5b), (S5c)	–
[24]	BRUSH	B	M6	(S6a)	–
[25]	DRUM FINAL ASSY	T/B	M6	2(S6b), 2(S6c) *CATCHER	–
[26]	GUIDE RAIL	T	M6	7(S6d), 8(S6d)	(Refer to part list.)
[27]	POLE BASE (S)ASSY	T	M6	–	–
[28]	POLE BASE (T)ASSY	T	M6	–	–
[29]	COVER PLATE	T	M7	–	–
[30]	DRIVE LEVER ASSY	T	M7	–	–
[31]	MOTOR BRACKET ASSY	T	M7	3(S7)	–
[32]	CONTROL CAM	T	M8	(W8a)	See, Adjustment procedure for Section 2.2.5
[33]	LINK LEVER	T	M8	_	See, Adjustment procedure for Section 2.2.5
[34]	MIDDLE GEAR	T	M8	–	–
[35]	LOADING GEAR(T) ASSY	T	M8	(W8b)	See, Adjustment procedure for Section 2.2.5
[36]	LOADING GEAR(S) ASSY	T	M8	(W8b)	–
[37]	LOADING RING ASSY	T	M8	4(S8)	See, Adjustment procedure for Section 2.2.5

Fig.2-2-1

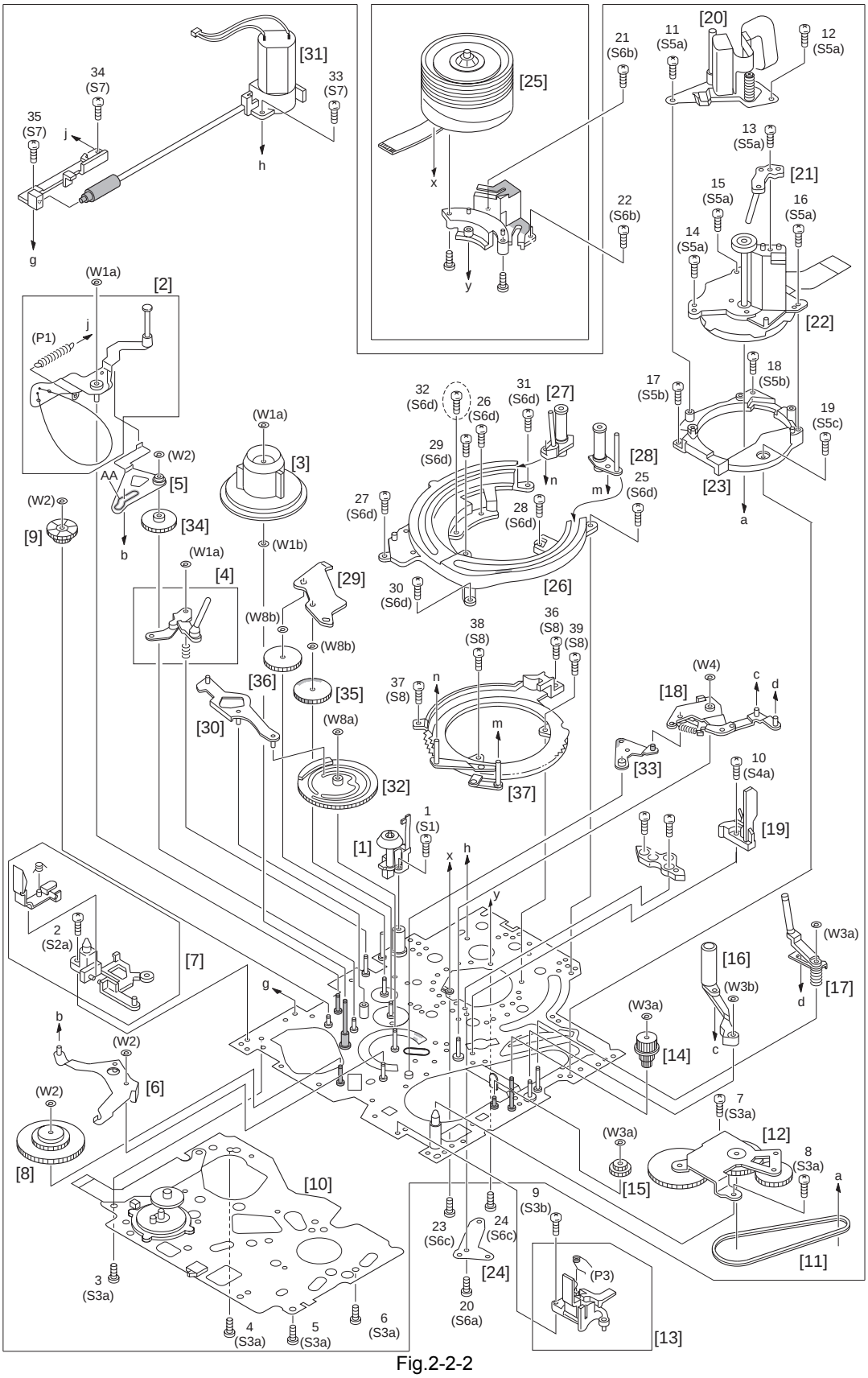

[31]
34 (S7)
33 (S7)
35 (S7)
j
h
g
[25]
x
y
21 (S6b)
22 (S6b)
[20]
11 (S5a)
12 (S5a)
13 (S5a)
[21]
15 (S5a)
16 (S5a)
14 (S5a)
[22]
(W1a)
[2]
(P1)
j
AA
(W2)
[5]
b
[34]
[9]
(W2)
(W1a)
[3]
(W1b)
[4]
[29]
(W8b)
(W8b)
[36]
[35]
[30]
(W8a)
[32]
32 (S6d)
26 (S6d)
31 (S6d)
[27]
29 (S6d)
n
[28]
m
25 (S6d)
27 (S6d)
28 (S6d)
[26]
30 (S6d)
17 (S5b)
18 (S5b)
19 (S5c)
[23]
a
38 (S8)
36 (S8)
39 (S8)
37 (S8)
n
m
[37]
(W4)
c
d
[18]
[33]
10 (S4a)
[19]
[1]
1 (S1)
x
h
y
2 (S2a)
[7]
g
b
(W2)
[6]
(W2)
[8]
[10]
3 (S3a)
4 (S3a)
5 (S3a)
6 (S3a)
23 (S6c)
24 (S6c)
9 (S3b)
[24]
20 (S6a)
(P3)
[13]
(W3a)
[16]
(W3b)
c
(W3a)
[14]
(W3a)
[17]
d
7 (S3a)
(W3a)
[15]
[12]
8 (S3a)
a
[11]

Fig.2-2-2

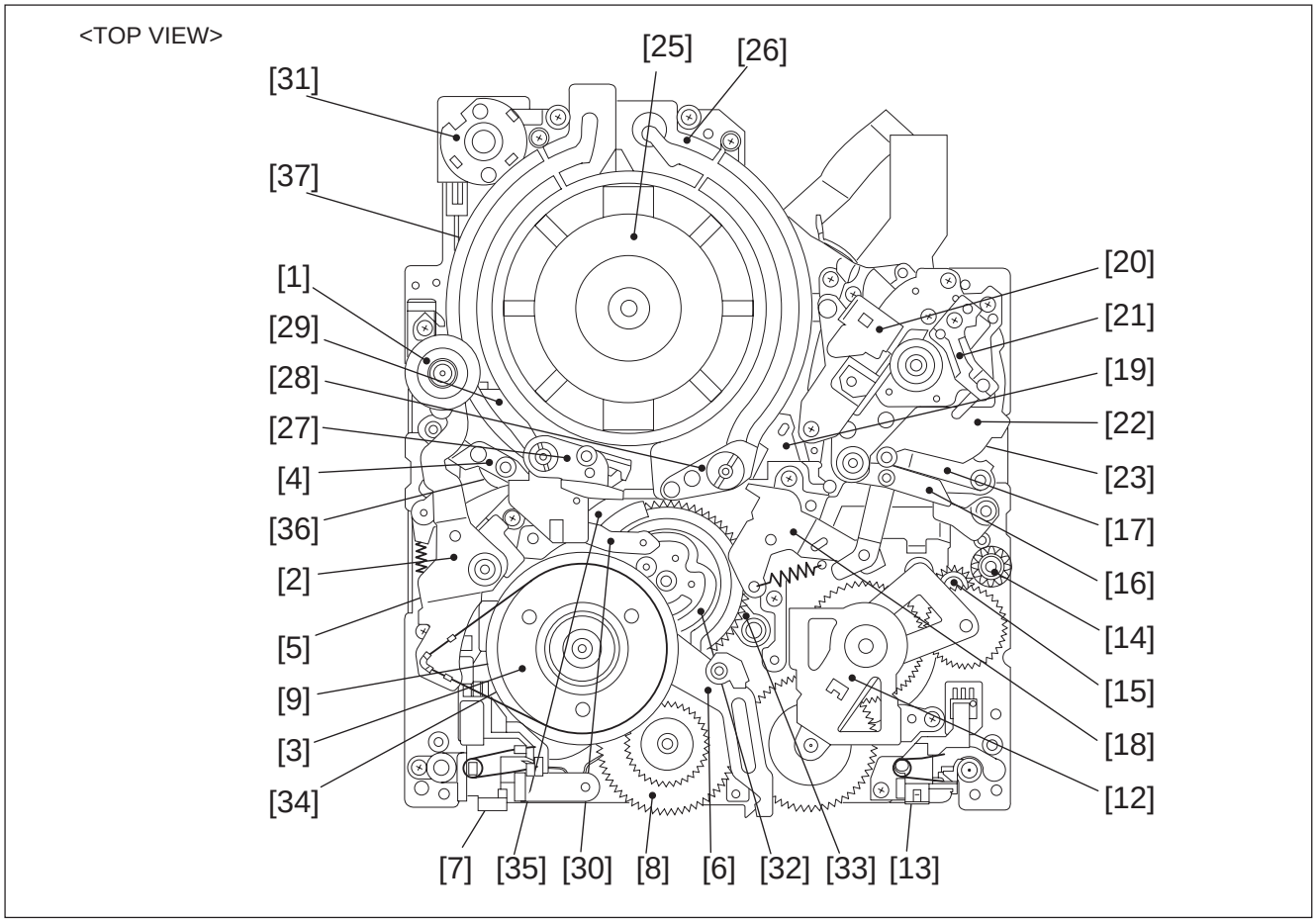


Fig.2-2-3

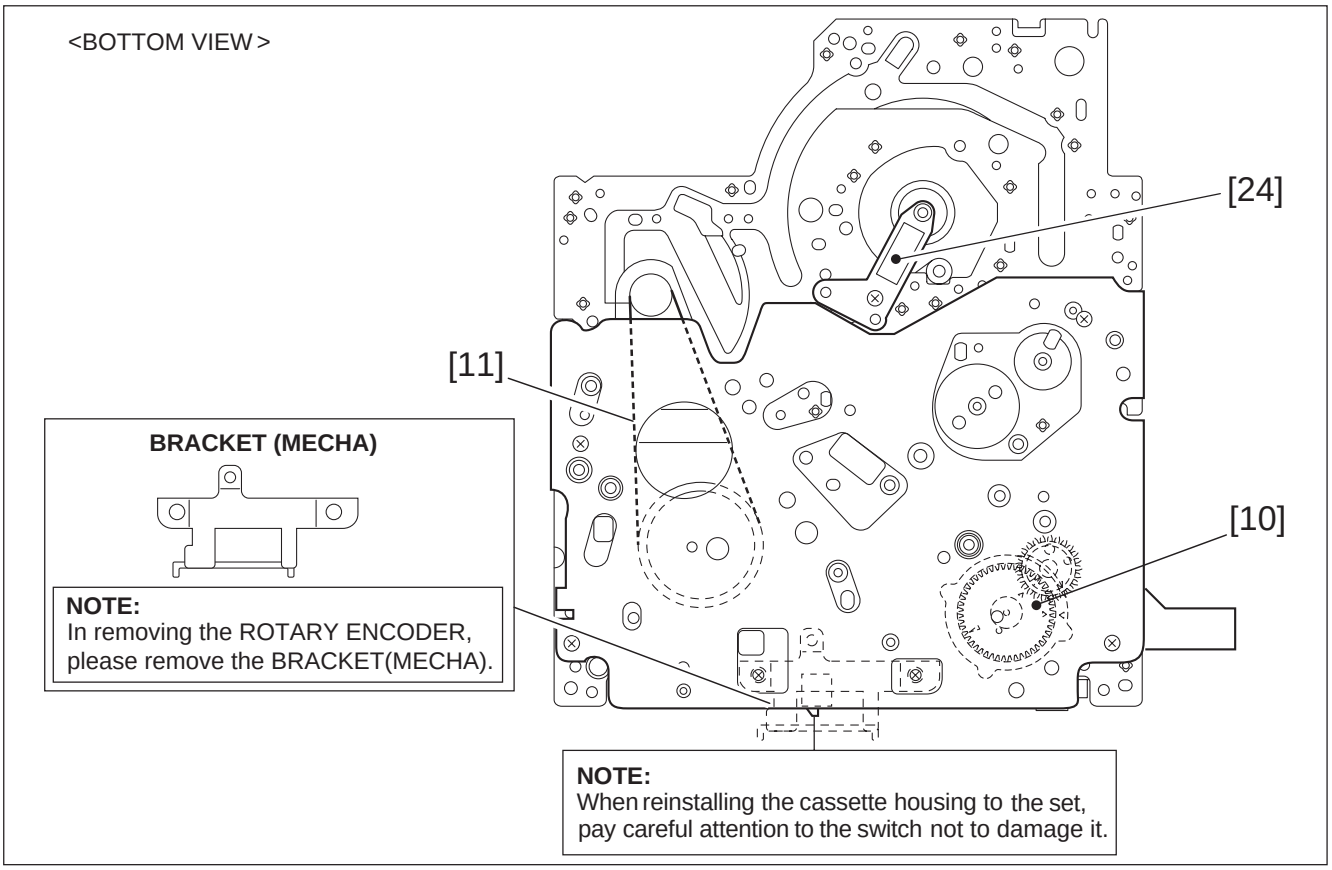

<BOTTOM VIEW>
[24]
[11]
[10]
BRACKET (MECHA)
NOTE:
In removing the ROTARY ENCODER, please remove the BRACKET(MECHA).
NOTE:
When reinstalling the cassette housing to the set, pay careful attention to the switch not to damage it.

Fig.2-2-4

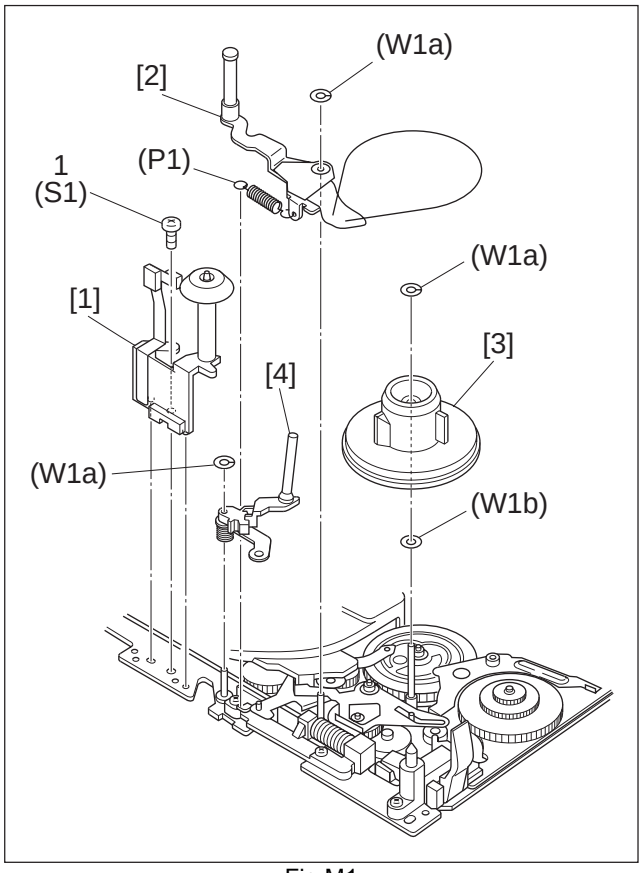


Fig.M1

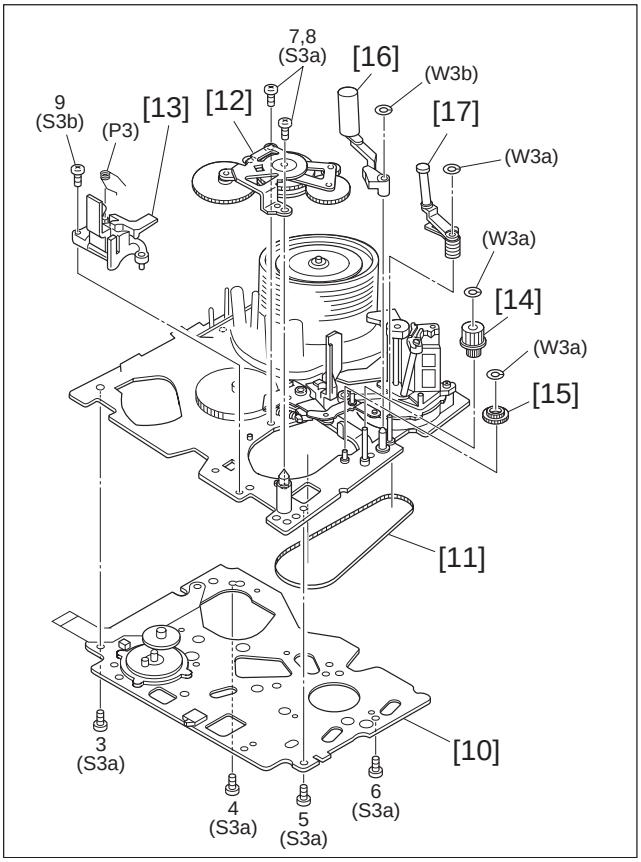


Fig.M3

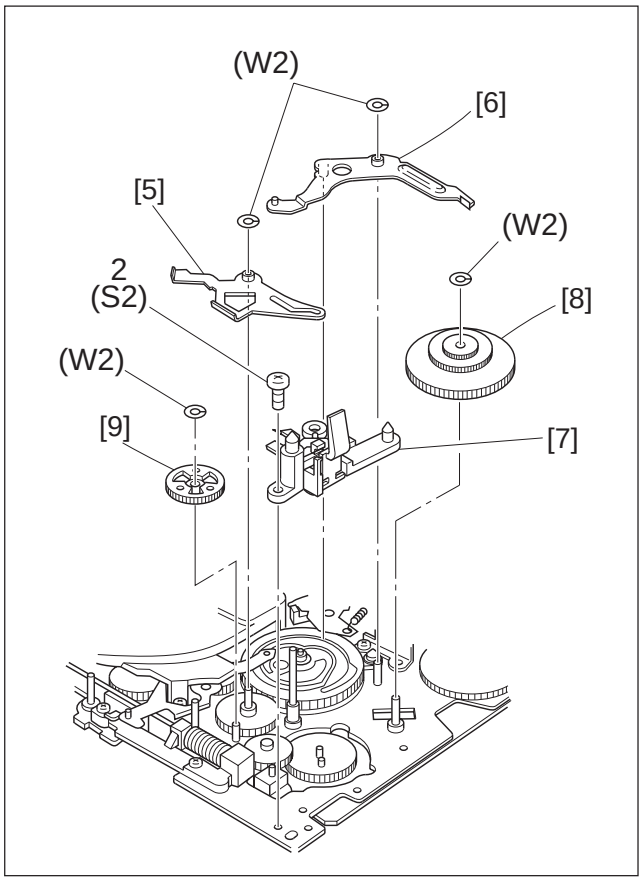


Fig.M2

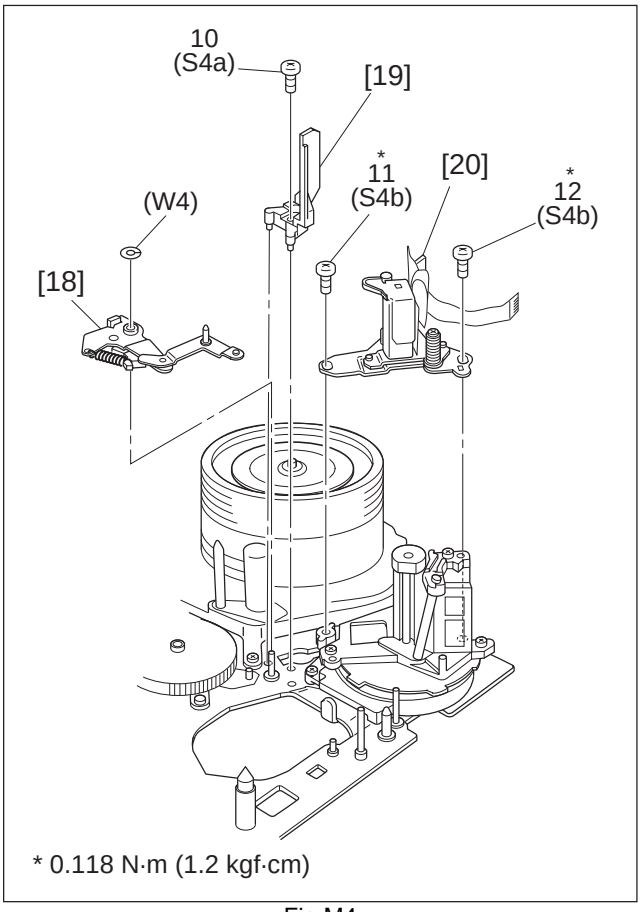


Fig.M4

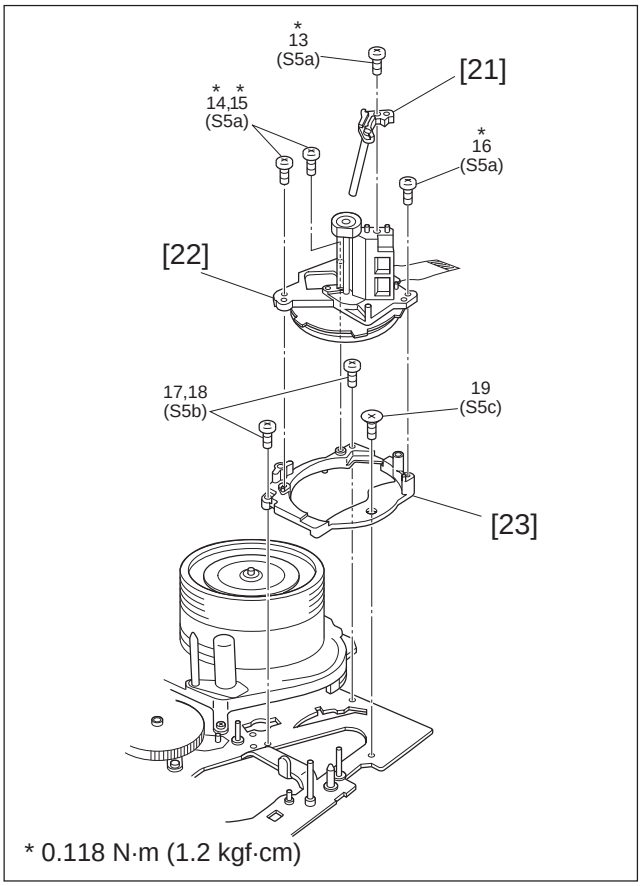


Fig.M5

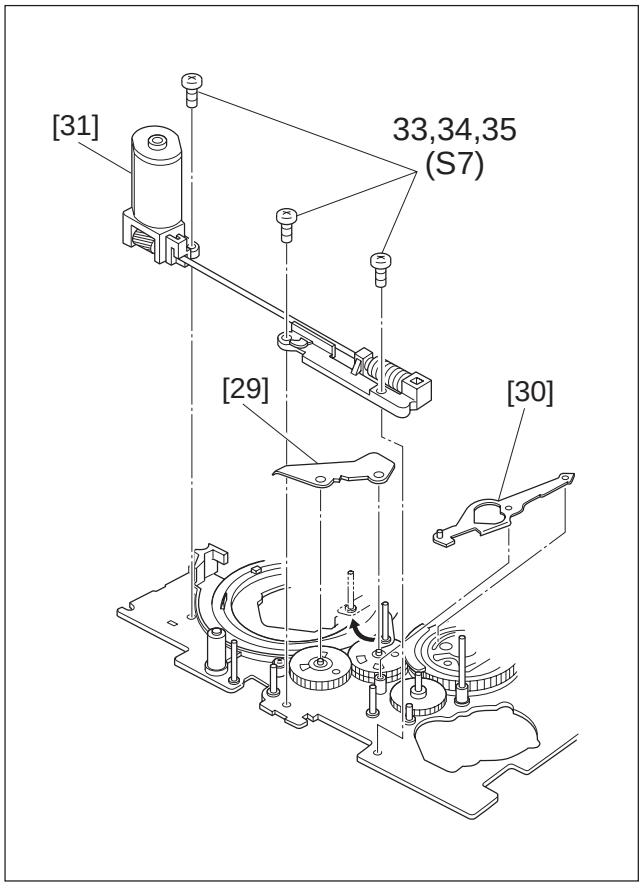


Fig.M7

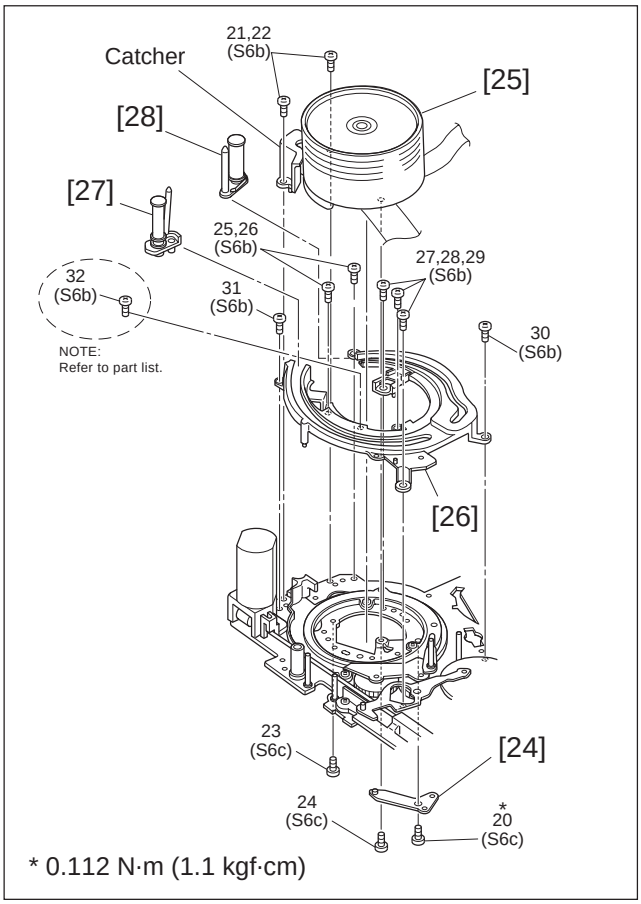


Fig.M6

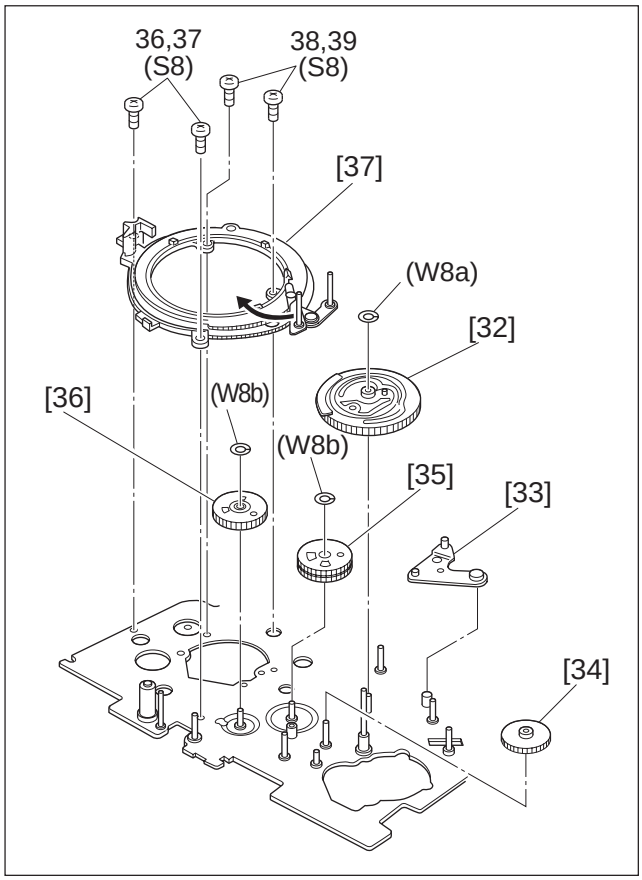


Fig.M8

2.2.4 CHECKUP AND ADJUSTMENT OF MECHANISM PHASE

NOTE:

Pay careful attention to the installing order and phase of mechanism parts of the loading system.

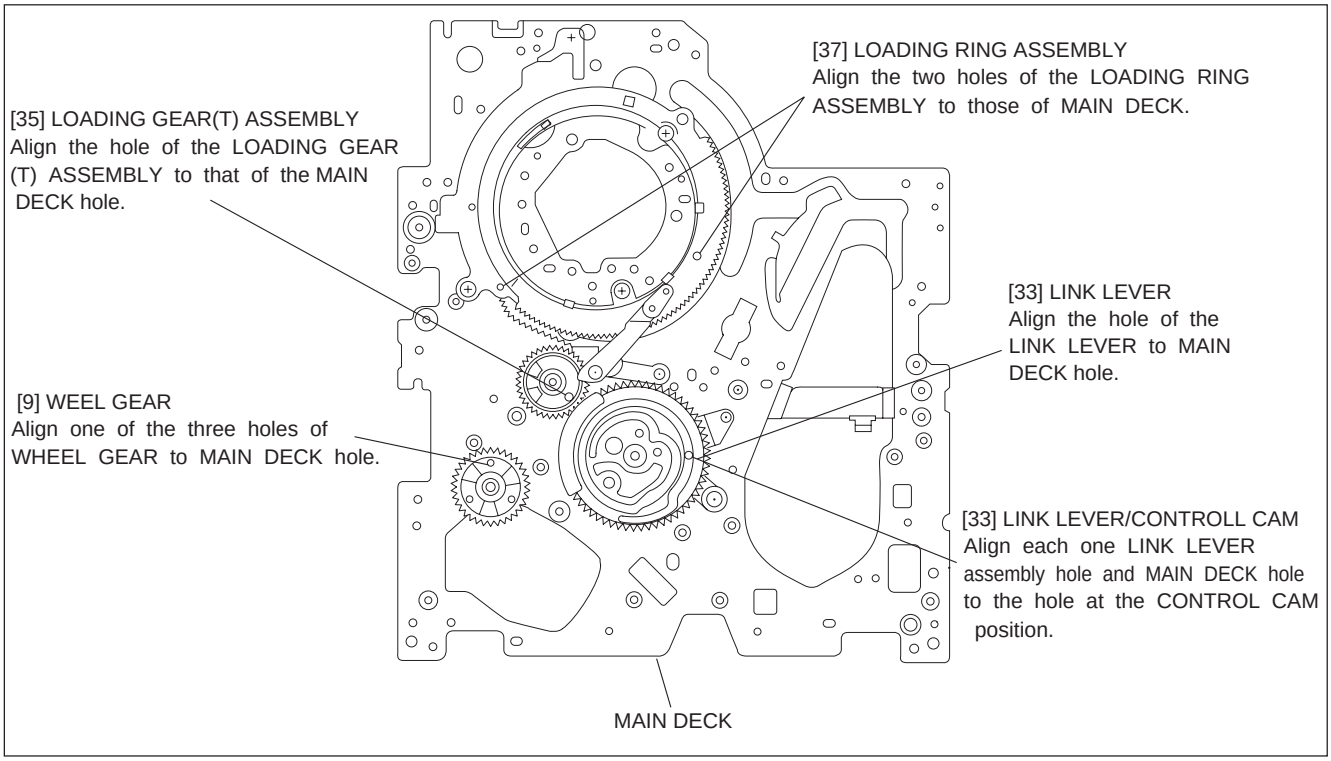

[37] LOADING RING ASSEMBLY
Align the two holes of the LOADING RING ASSEMBLY to those of MAIN DECK.
[35] LOADING GEAR(T) ASSEMBLY
Align the hole of the LOADING GEAR (T) ASSEMBLY to that of the MAIN DECK hole.
[33] LINK LEVER
Align the hole of the LINK LEVER to MAIN DECK hole.
[9] WEEL GEAR
Align one of the three holes of WHEEL GEAR to MAIN DECK hole.
[33] LINK LEVER/CONTROLL CAM
Align each one LINK LEVER assembly hole and MAIN DECK hole to the hole at the CONTROL CAM position.
MAIN DECK

Fig.2-2-5 Top of main deck

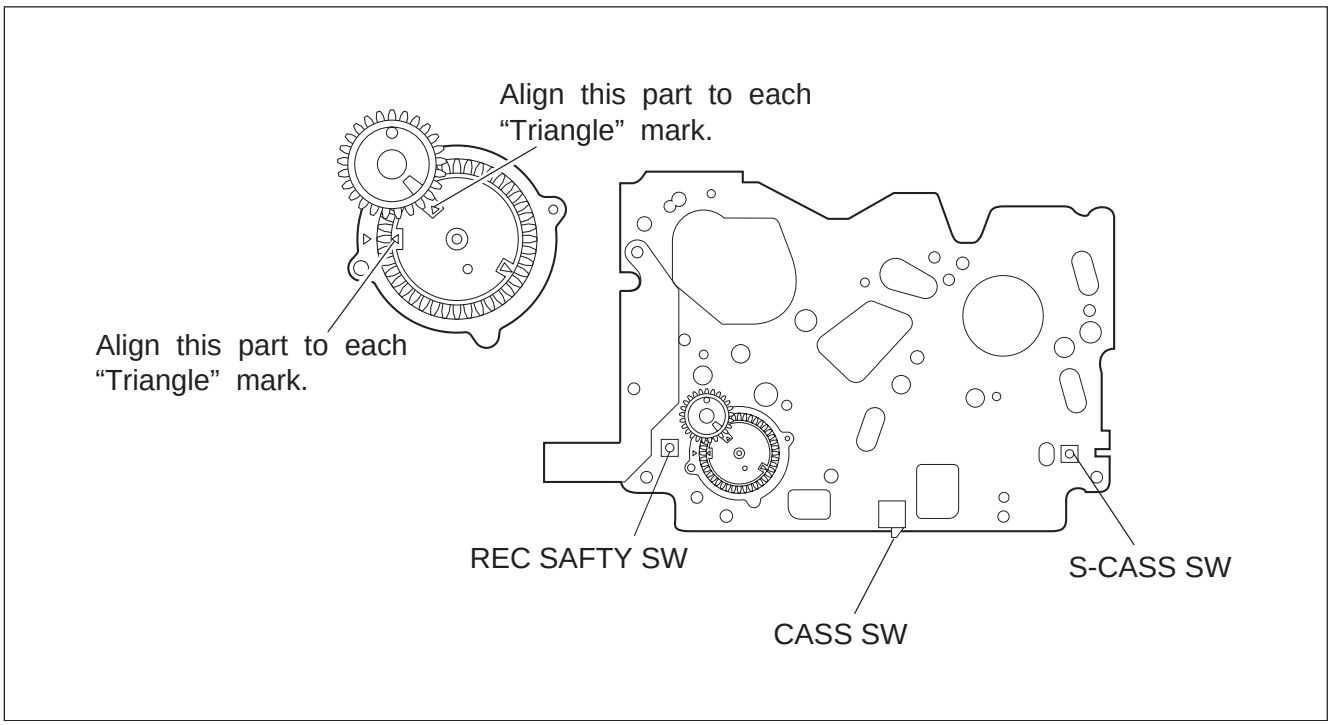


Fig.2-2-6 Rotary encoder

2.2.5 SERVISE NOTE

Use the following chart to manage screws.

Symbol No.	[1]	[7]	[10]				[12]		[13]	[19]	[20]		[21]	[22]			[23]		
Removing order of screw	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19
Place to stick screw																			
Reference drawing (Fig. No.)	M1	M2	M3							M4			M5						
Screw tightening torque	I										II						I		

Symbol No.	[24]	[25]			[26]							[31]			[37]		
Removing order of screw	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39
Place to stick screw																				
Reference drawing (Fig. No.)	M6													M7			M8			
Screw tightening torque	III	I																		

<NOTE>

・Pay careful attention to tightening torque for each screw.
Torque setting value of torque driver is limited. At the values over the maximum torque setting value, fasten a screw manually not to damage the screw thread.

I : 0.216N・m(2.2kgf・cm)　　II : 0.118N・m(1.2kgf・cm)　　III : 0.112N・m(1.1kgf・cm)

Fig.2-2-7

2.2.6 REMARKS

2.2.6.1 Cleaning

(1) For cleaning of the upper drum (particularly video heads), use fine-woven cotton cloth with alcohol soaks through. Do not move the cloth but turn the upper drum counterclockwise.

NOTE:
Make sure not to move the cloth in the vertical direction to the video head, since it may cause damage of the video heads.

(2) For cleaning of parts of the tape transport system except the upper drum, use fine-woven cotton cloth or cotton swab soaked alcohol.

(3) After cleaning, confirm that the cleaned parts are completely dry before loading the deck with cassette tape.

2.2.6.2 Applying oil and grease

(1) Periodical oiling and greasing are not required but should be done to new parts when replacing. If oil and grease on the other parts of the other party are old and dirty, wipe them clean and apply new oil or grease.

(2) For parts and points to apply oil and grease, refer to the exploded view of the 3.2 VHS-C MECHANISM ASSEMBLY. Fig.2-2-8 specifies oil and grease to be used.

(3) When oiling, clean the objective parts with alcohol first and apply one or two drop(s) of oil. Too much oiling causes rotary parts to slip because of oil leakage.

Classification	Part No.	Symbol in drawing
Grease	KYODO-SH-JB	AA
Oil	YTU94027	BB

specifies oil and grease to be used

Fig.2-2-8

2.3 VHS MECHANISM

2.3.1 Notes

This model's mechanism relates closely to the rotary encoder and system control circuit (the rotary encoder is meshed with the control cam).
The system control circuit detects the mechanism condition using the rotary encoder's phase (internal switch phase). Therefore, the parts such as the rotary encoder, control plate, loading gear and control cam need to be installed correctly in order for the mechanism to operate properly. (For the mechanism phase adjustment, refer to the installation of each part.)

- Before using a soldering iron, be sure to disconnect the power plug from the AC outlet.
- Do not touch any of the adjustment points until a defect position is specified.
- When plugging or unplugging the connector, be sure not to damage the wire.
- Be sure the springs are hooked all the way around and in the correct direction.
- When performing repairs, take care not to damage a catch, etc.

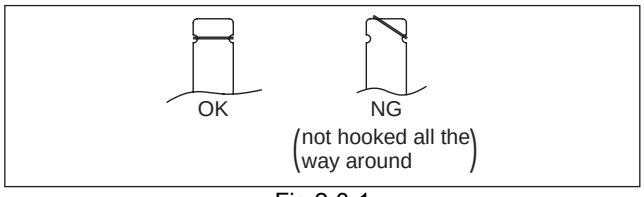


Fig.2-3-1

2.3.2 Mechanism operation check

When the mechanism is operated without a cassette loaded, operate the mechanism in the mechanism service mode.

2.3.3 Setting the mechanism assembling mode

The mechanism-assembling mode is provided with this mechanism. When disassembling and assembling, it is required to engage this mode.
Set the mode by adopting the following procedures.

(1) Remove the mechanism assembly using the disassembling procedure.
(2) Turn gear (a) of the loading motor manually to set the mechanism assembly to the eject end mode. Make sure that the main deck is connected to the guide hole (a) of the drive lever and the seal (a) of the main deck is connected to the mark "E" of the control plate. This condition is called the mechanism-assembling mode.

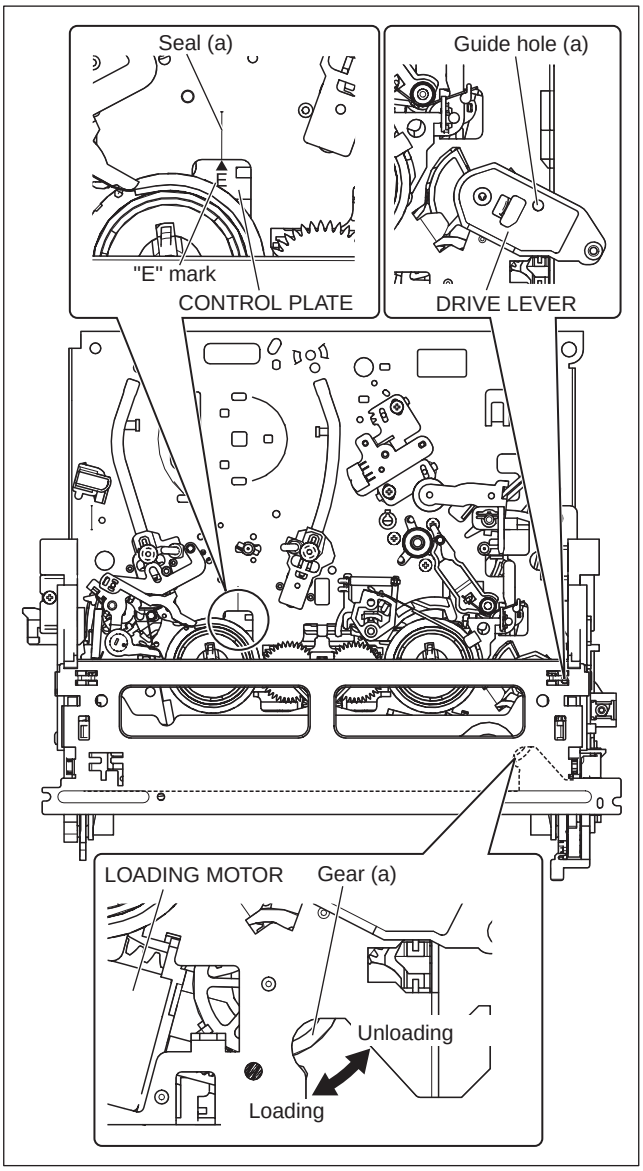


Fig.2-3-2

2.3.4 Layout of the main mechanism parts

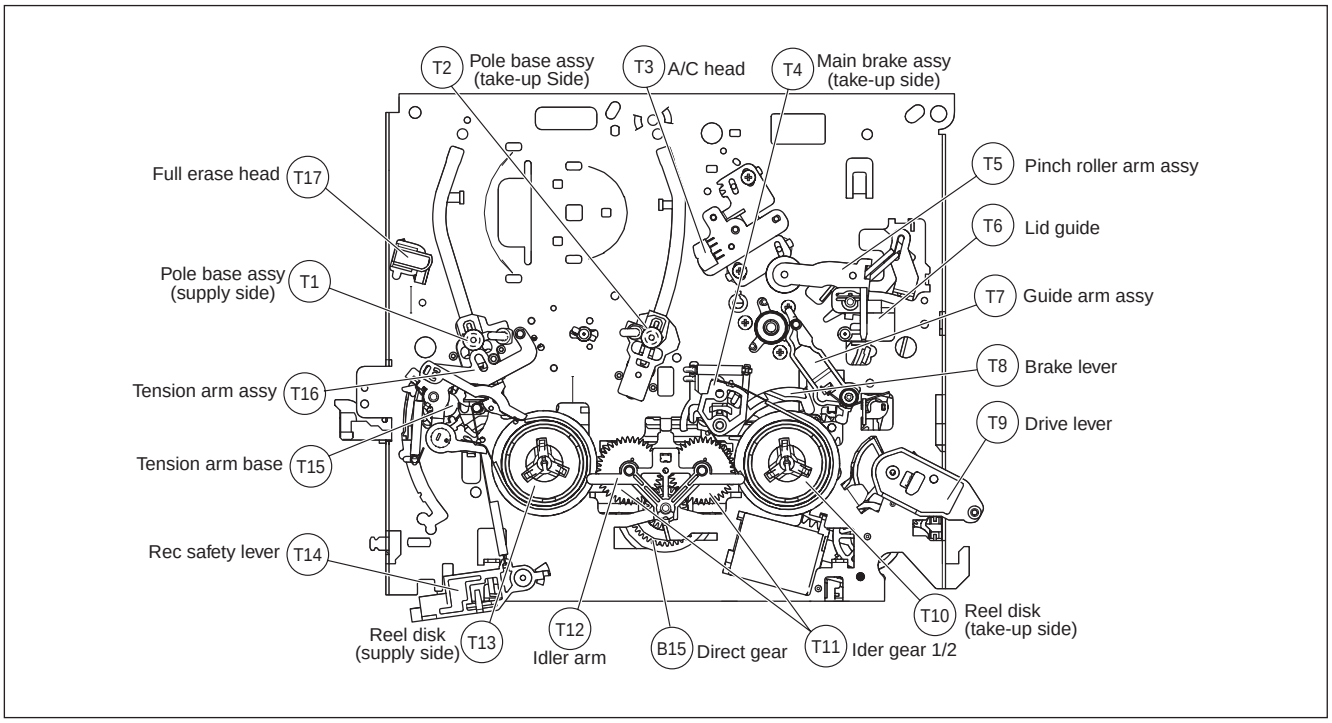

T2 Pole base assy (take-up Side)
T3 A/C head
T4 Main brake assy (take-up side)
Full erase head T17
T5 Pinch roller arm assy
T6 Lid guide
Pole base assy (supply side) T1
T7 Guide arm assy
T8 Brake lever
Tension arm assy T16
T9 Drive lever
Tension arm base T15
Rec safety lever T14
T10 Reel disk (take-up side)
Reel disk (supply side) T13
T12 Idler arm
B15 Direct gear
T11 Ider gear 1/2

Fig.2-3-3

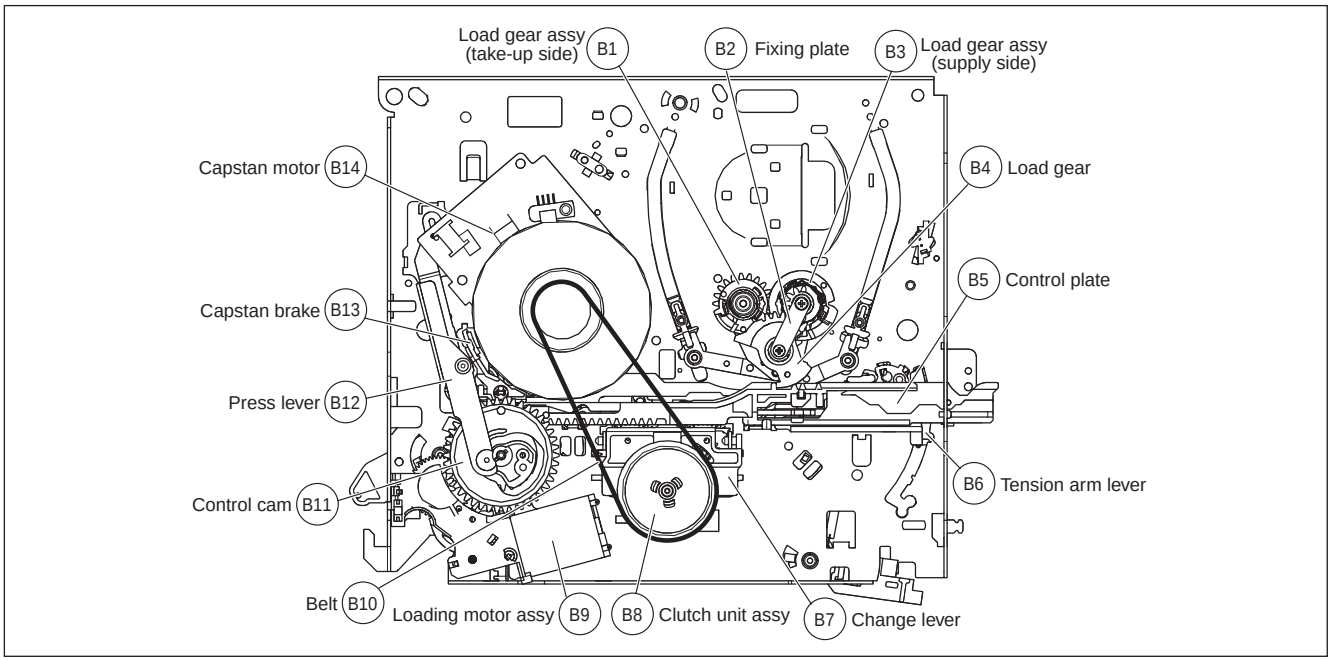


Fig.2-3-4

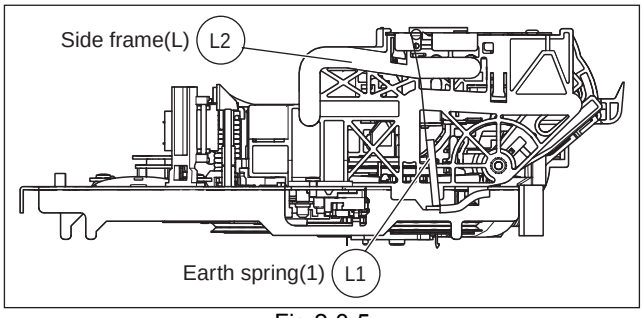


Fig.2-3-5

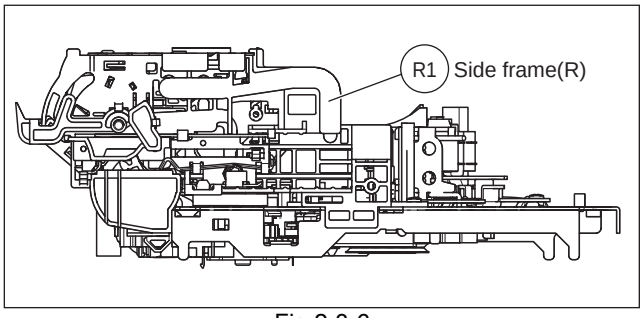


Fig.2-3-6

2.3.5 Disassembling procedure table

This table shows the order of parts removal when replacing each part. For replacement, remove the parts in the order of 1 to 13 shown in the table and install the parts in the reverse order.

The symbol number before each part name shows the number in the figure “Layout of the main mechanism parts”. T and B on the right of each part name show the side from which the part should be removed (T: From the front of the mechanism, B: From the rear of the mechanism, T/B: From both sides).

Symbols and numbers	Removal parts / (Reference items) Replacement parts	Front(T)/Back(B) of mechanism	Number of removal steps	Earth spring (1)	Top frame	Cassette holder	Side frame (L)	Drive arm	Side frame (R)	Lid guide	Idler arm	Idler gear 1/2	Main brake (T)	Reel disk (T)	Tension arm	Tension arm base	Press lever	Control cam	Capstan brake assy	Loading motor assy	Belt	Fixing plate	Load gear	Loading gear assy (S)	Loading gear assy (T)	Control plate	Clutch unit	Direct gear
L1	2.1 Earth spring (1)	T	1																									
-	2.1 Top frame	T	2	1																								
-	2.1 Cassette holder	T	3	1	2																							
L2	2.1 Side frame (L)	T	3	1	2																							
-	2.1 Drive arm	T	5	1	2	3	4																					
R1	2.1 Side frame (R)	T	3	1	2																							
T3	2.2 A/C head	T	1																									
T17	- FE head	T/B	1																									
T7	2.3 Guide arm assy	T	1																									
T6	2.3 Lid guide	T	1																									
T5	2.3 Pinch roller arm assy	T	2							1																		
T12	2.4 Idler arm	T	4	1	2	3																						
T11	2.4 Idler gear 1/2	T	5	1	2	3					4																	
T4	2.5 Main brake assy (T)	T	6	1	2	3					4	5																
T10	2.5 Reel disk (T)	T	7	1	2	3					4	5	6															
T16	2.5 Tension arm	T	6	1	2	3					4	5																
T13	2.5 Reel disk (S)	T	7	1	2	3					4	5			6													
T15	2.5 Tension arm base	T	7	1	2	3					4	5			6													
-	- T-up head	T	8	1	2	3					4	5			6	7												
-	- T-up lever	T	8	1	2	3					4	5			6	7												
T8	2.5 Brake lever	T	8	1	2	3					4	5	6	7														
T14	2.5 Rec safety lever	T	7	1	2	3	4	5	6																			
B12	2.6 Press lever	B	1																									
B11	2.6 Control cam	B	2														1											
B13	2.6 Capstan brake assy	B	3														1	2										
B9	2.6 Loading motor assy	B	4														1	2	3									
B10	2.7 Belt	B	1																									
B14	2.7 Capstan motor	T/B	2																		1							
-	- Wire holder	T/B	1																									
B2	2.7 Fixing plate	B	1																									
B4	2.7 Load gear	B	2																			1						
B3	2.7 Loading gear assy(S)	B	3																			1	2					
B1	2.7 Loading gear assy(T)	B	4																			1	2	3				
T1	- Pole base assy(S)	T/B	4																			1	2	3				
T2	- Pole base assy(T)	T/B	5																			1	2	3	4			
-	- Load gear base	B	5																			1	2	3	4			
B5	2.7 Control plate	B	6														1	2			3	4	5					
T9	- Drive lever	T/B	10	1	2	3	4	5	6								7	8		9								
B8	2.8 Clutch unit	B	2																		1							
B15	2.8 Direct gear	B	3																		1						2	
B7	- Change lever	T/B	6								1	2									3						4	5
B6	- Tension arm lever	T/B	14	1	2	3					4	5			6	7	8	9			10	11	12			13		

2.3.6 REPLACEMENT OF THE MAIN MECHANISM PARTS

2.3.6.1 Cassette holder

2.3.6.1.1 Removal

(1) Remove the screws (a) and (b).
(2) Hold up the top frame, cassette holder assembly, drive arm assembly and side frames (L/R) all together and remove them by releasing the hooks (a) and (b).

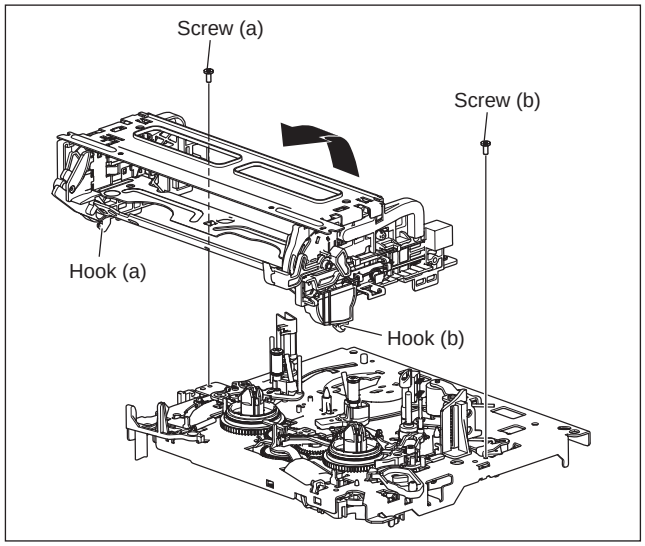


Fig.2-3-7

2.3.6.1.2 Installation (phase adjustment)

(1) Turn gear (a) of the loading motor assembly so that the main deck connects to the guide hole (a) of the drive lever.
(2) Hook the main deck to hooks (a) and (b).
(3) Place the projection of the drive lever to section (a) of the side frame (R) and install the cassette holder to the main deck. Make sure that the bosses of the side frame (L/R) connect with the holes (a) and (b) of the main deck.
(4) Secure screws (a) and (b).

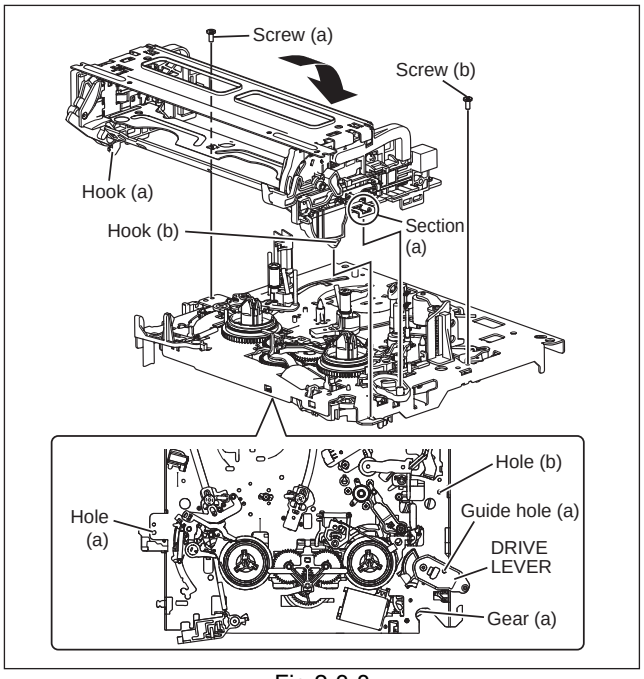


Fig.2-3-8

2.3.6.1.3 Disassembling

(1) Release hook (a) to remove the earth spring (1) from the top frame.
(2) Release the catches (a) and (b) and pull the top frame in the direction shown by the arrow (a) to remove it.
(3) Pull out the side frame (R).
(4) Pull out the cassette holder assembly and drive arm assembly from the side frame (L).

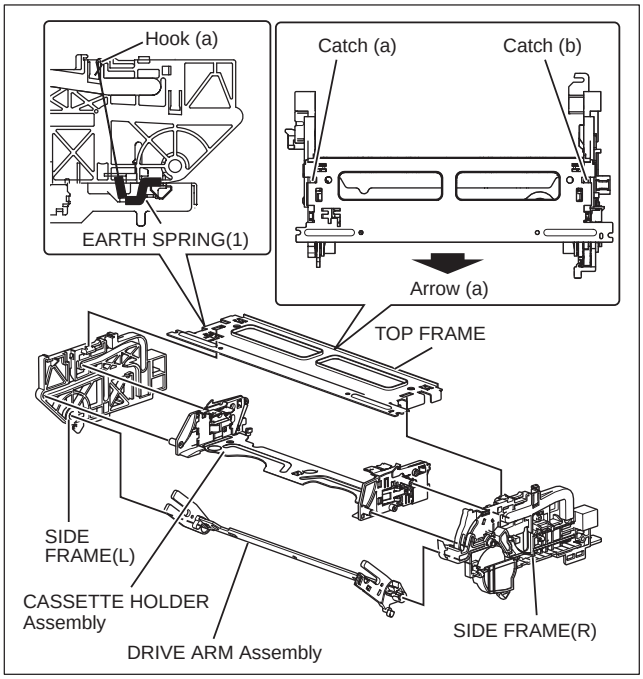


Fig.2-3-9

2.3.6.1.4 Assembling (installation and phase adjustment)

(1) Turn gear (a) of the loading motor assembly so that the main deck connects to the guide hole (a) of the drive lever.
(2) Place the projection of the drive lever on section (a) of the side frame (R) and install the side frame (R) to the main deck.
(3) Secure screw (b).
(4) Place section (b) of the drive arm on the gear of the side frame (R). Make sure that the pin of the door opener connects with section (c) of the drive arm.
(5) Place the drive arm on section (d) of the side frame (L) and install the side frame (L) on the main deck. Be sure to connect the earth spring (1) to the side frame (L).
(6) Secure screw (a).
(7) Turn gear (a) of the loading motor assembly until the drive arm is vertical.
(8) Place the slit of the side frame (L/R) at the foot of the cassette holder assembly and install the cassette holder.
(9) Place the top frame on the position guide (a) of the side frame (L/R) and push it in the direction shown by the arrow (a) for installation.
(10) Hook the earth spring (1) to the hook (a) of the top frame.

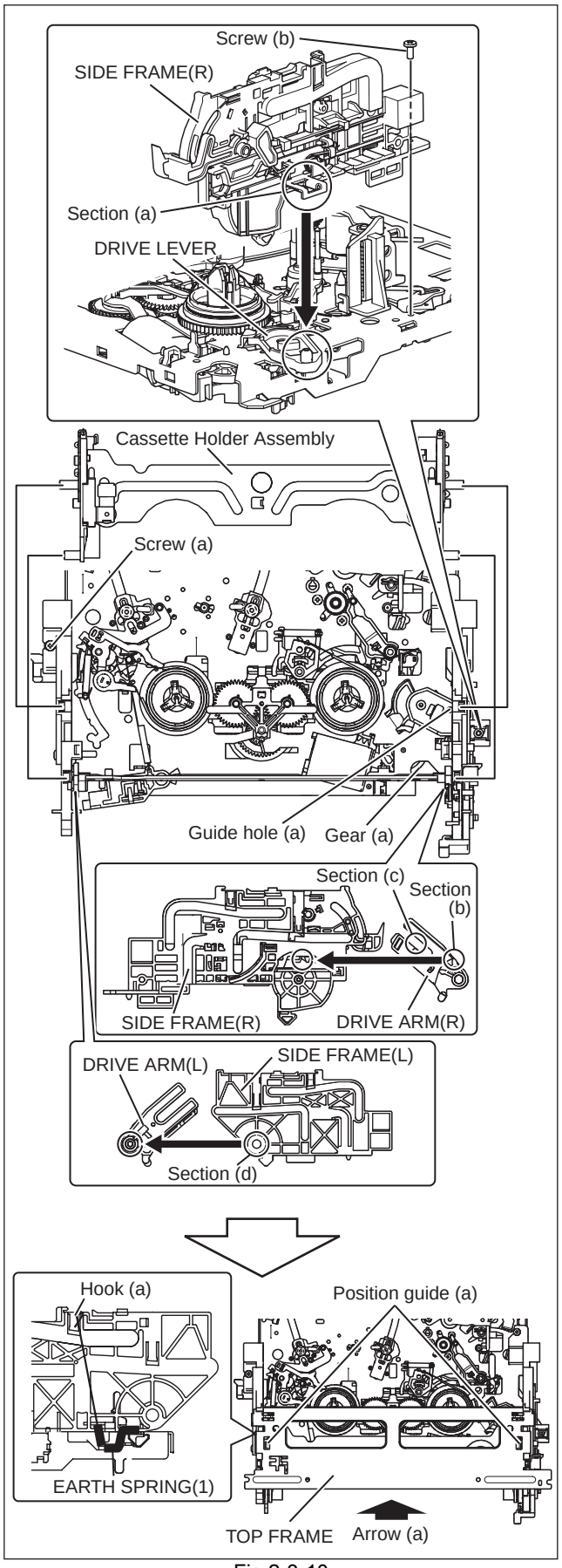


Fig.2-3-10

2.3.6.2 A/C head

2.3.6.2.1 Removal

(1) Remove screws (a) and (b).
(2) Remove the A/C head together with the head base.
(3) Remove the screws (c), (d) and (e) to remove the spring (a) and the A/C head from the Head base.

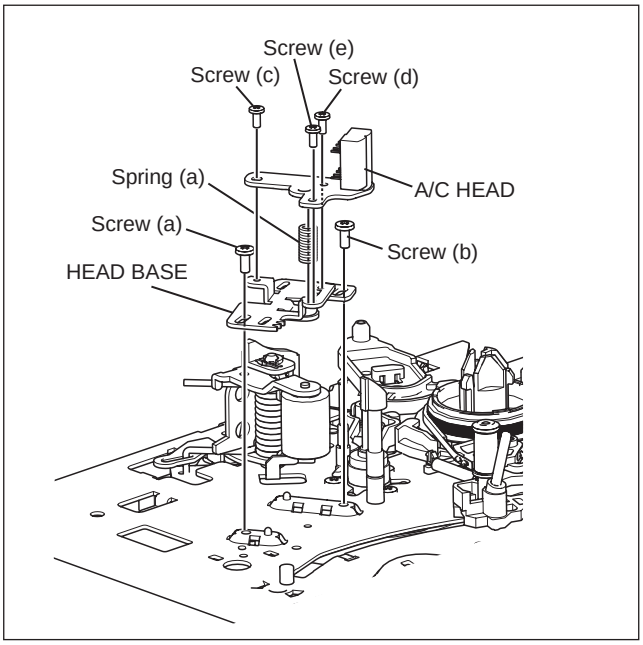


Fig.2-3-11

2.3.6.2.2 Installation (initial setting)

To install the A/C head to the head base, secure the screws in the order of (c), (d) and (e). To make the adjustment easy, temporarily elevate the A/C head.

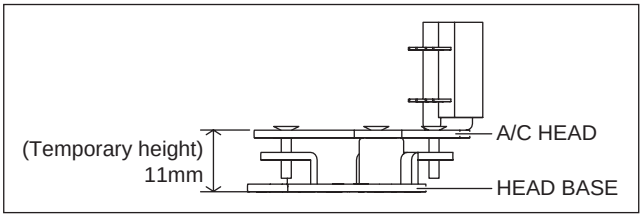


Fig.2-3-12

2.3.6.3 Guide arm, pinch roller arm

2.3.6.3.1 Removal

(1) Remove the spring (a) from the hook (a) and detach the guide arm assembly.
(2) Release the catch (a) to remove the lid guide.
(3) Remove the spring (b) from the hook (b) and detach the pinch roller arm assembly.

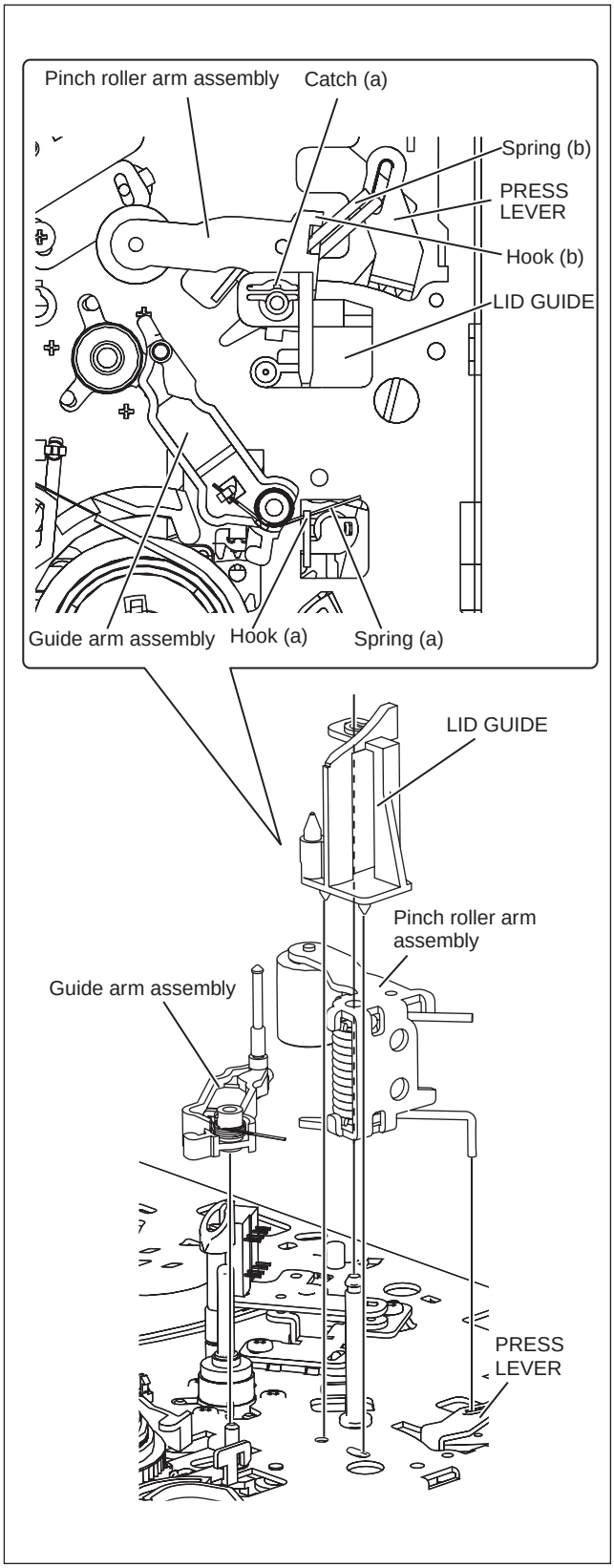


Fig.2-3-13

2.3.6.4 Idler arm, idler gear 1/2

2.3.6.4.1 Removal

(1) Release the catches (a) and (b) to detach the idler arm.
(2) Detach the idler gear 1/2.

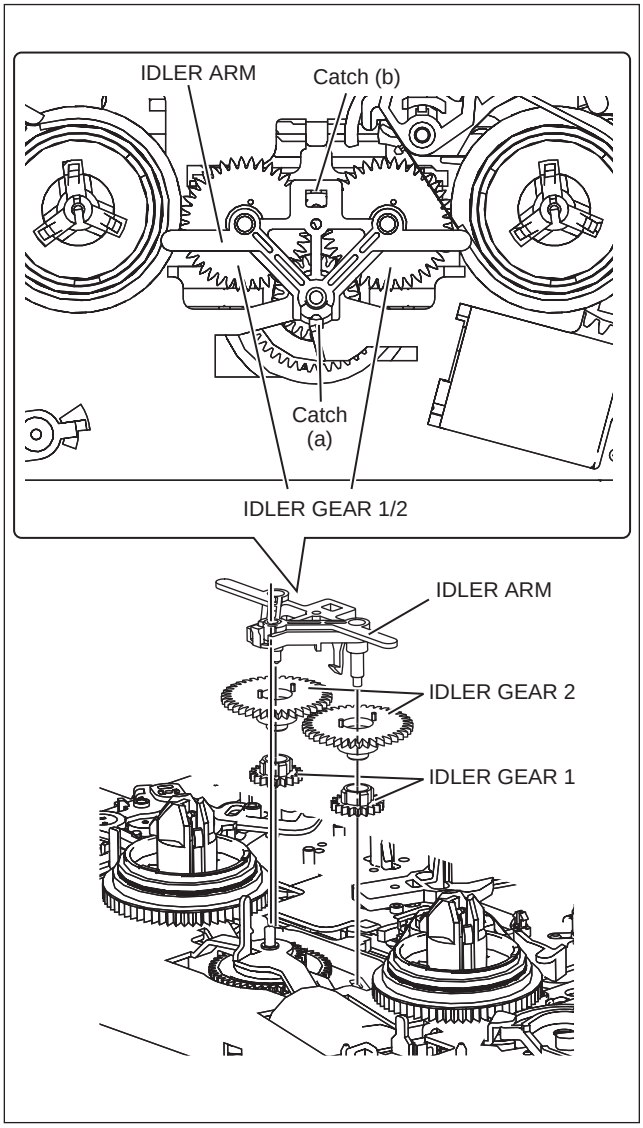


Fig.2-3-14

2.3.6.5 Main brake (T), brake lever, tension arm, reel disk (S/T), Rec safety lever

2.3.6.5.1 Removal

(1) Remove the spring (a). (Detach section (b) of the spring (a).)
(2) Release the catch (a) to detach the main brake (T).
(3) Release the catch (b) to detach the reel disk (T) and the spacer.
(4) Lift up and turn section (b) of the brake lever counterclockwise to remove the brake lever.
(5) Remove the spring (b) from the hook (a).
(6) Release the catch (c) to detach the tension arm.
(7) Release the catch (d) to detach the reel disk (S) and the spacer.
(8) Remove the spring (c) from the hook (b).
(9) Turn the tension arm base in the direction shown by arrow (a) to release catch (e). Place the projections of the tension arm base to the holes (a) to detach the tension arm base.
(10) While releasing the catch (f), turn the Rec safety lever counterclockwise to remove it.

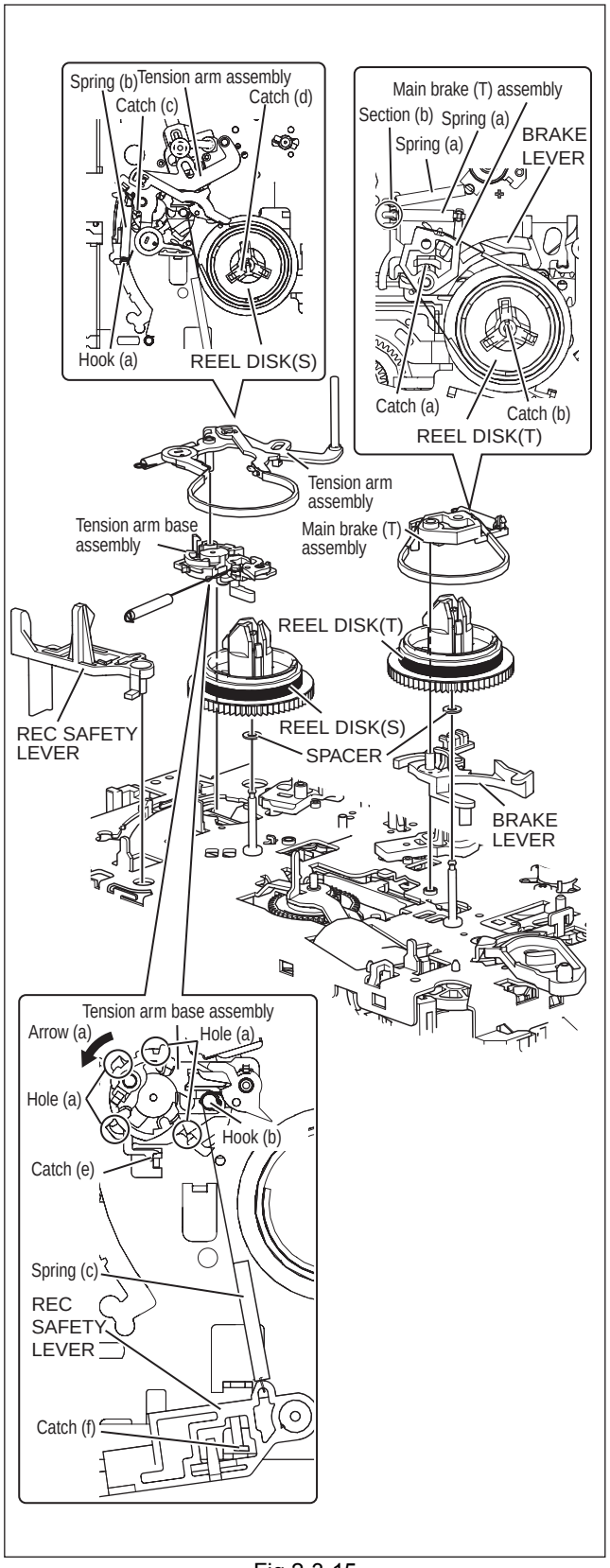


Fig.2-3-15

2.3.6.6 Press lever, control cam, capstan brake assembly, loading motor assembly

2.3.6.6.1 Removal

(1) Remove the slit washer (a) to detach the press lever.
(2) Release the slit washer (b) to detach the control cam.
(3) Release the catch (b) to detach the capstan brake assembly.
(4) Remove the solder (a).
(5) Remove the screw (a).
(6) Release the catches (c) and (d) to detach the loading motor assembly.

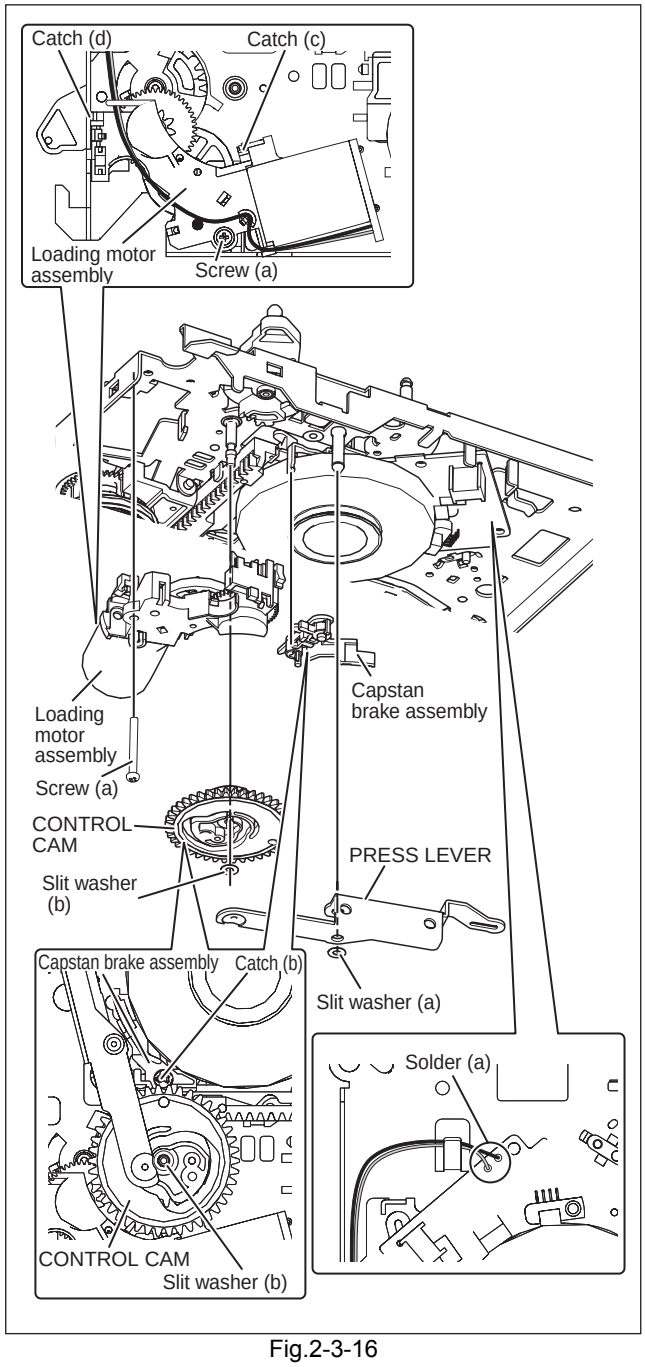


Fig.2-3-16

2.3.6.6.2 Installation (phase adjustment)

(1) Attach the loading motor assembly to the main deck.
(2) Secure the screw (a).
(3) Solder the wire to section (a).
(4) Arrange the wire along with the position guide (b).
(5) Attach the capstan brake assembly to the main deck.
(6) Place the main deck on the guide hole (a) of the control plate.
(7) Place the main deck on the guide hole (b) of the drive lever.
(8) Place the main deck no guide hole (c) of the control cam to install the control cam.
(9) Move the capstan brake in the direction shown by the arrow (a) to attach the press lever to the shaft (a). Make sure that the boss of the press lever fits in the control cam, and that the shaft (b) of the pinch roller arm assembly connects with the hole of the press lever.
(10) Attach slit washer (a) to shaft (a).

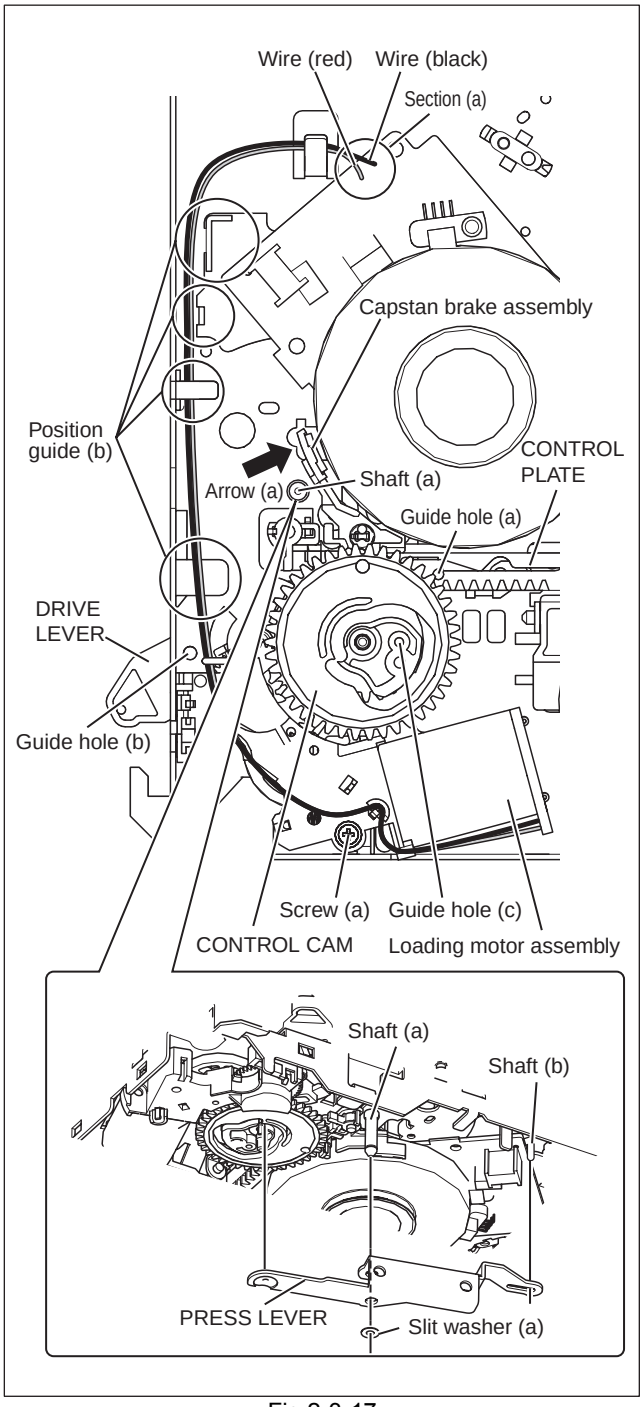


Fig.2-3-17

Note:

- When replacing the worm bearing of the loading motor assembly, attach it according to the following specification.
  If worm bearing is not attached correctly, a mechanism noise may occur. (See Fig. 2-3-18)

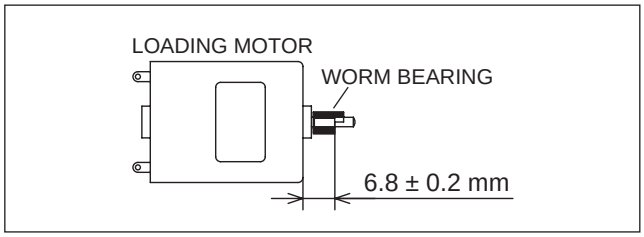


Fig.2-3-18

2.3.6.7 Capstan motor, load gear, control plate

2.3.6.7.1 Removal

(1) Detach the belt.
(2) Check that the FFC connector on the drum is disconnected.
(3) Release the catch (a) to remove the FFC wire.
(4) Remove the screws (a) to detach the capstan motor.
(5) Remove the screws (b) to detach the fixing plate.
(6) Release the catch (b) to detach the load gear.
(7) Turn the load gear (S/T) in the loading direction to detach it.
(8) Remove the control plate.

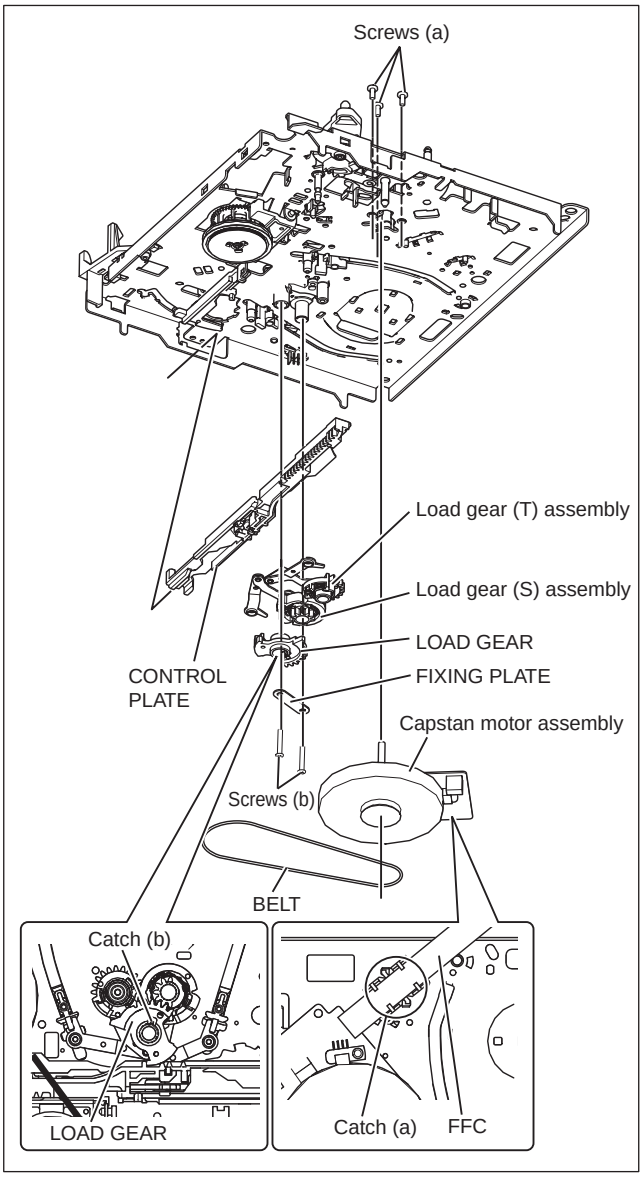


Fig.2-3-19

2.3.6.7.2 Installation (phase adjustment)

(1) Place the main deck on the guide hole (a) of the tension arm lever.
(2) Place the main deck on the guide hole (b) of the brake lever.
(3) Attach the control plate to align with the position guide (a).
(4) Place the hole (c) of the load arm (T) on the pole base (T) and the load gear (T) on the load gear base.
(5) Place the hole (d) of the load arm (S) on the pole base (S) and the load gear (S) on the load gear base. Be sure to align the guide mark (e) of the load gear (T) to that of the load gear (S).
(6) Turn the load gear (S/T) in the unloading direction to place the main deck on the guide hole (f) of the load gear (T).
(7) Place the main deck on the guide hole (g) of the control plate.
(8) Attach the load gear on the load gear base so that the control plate is placed on the edge (h) of the load gear.
(9) Place the fixing plate on the shaft of the load gear base and secure the screws (b).

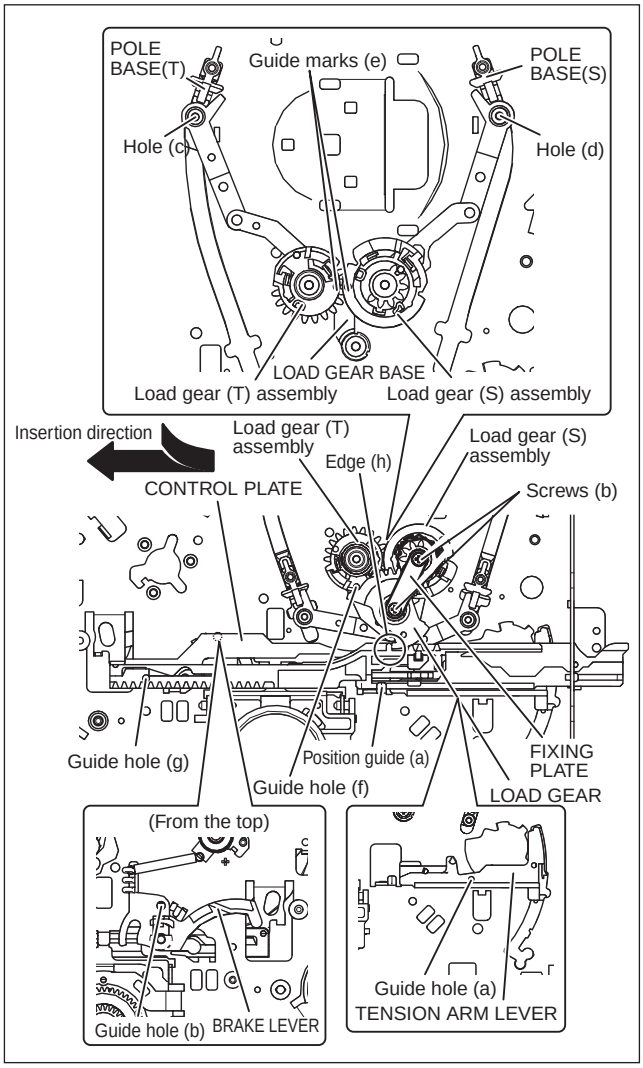


Fig.2-3-20

2.3.6.8 Clutch unit assembly, direct gear

2.3.6.8.1 Removal

(1) Remove the slit washer (a) to detach the clutch unit assembly.
(2) Remove the spring (a) and the direct gear.

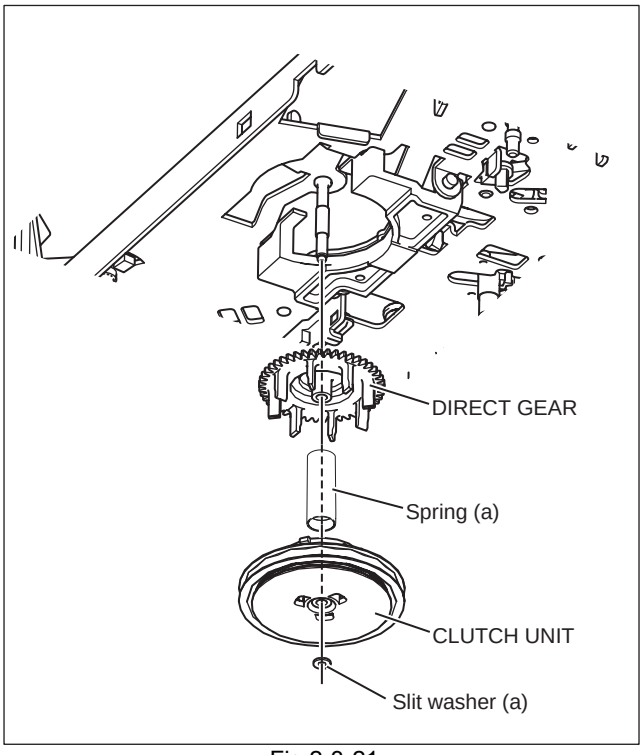
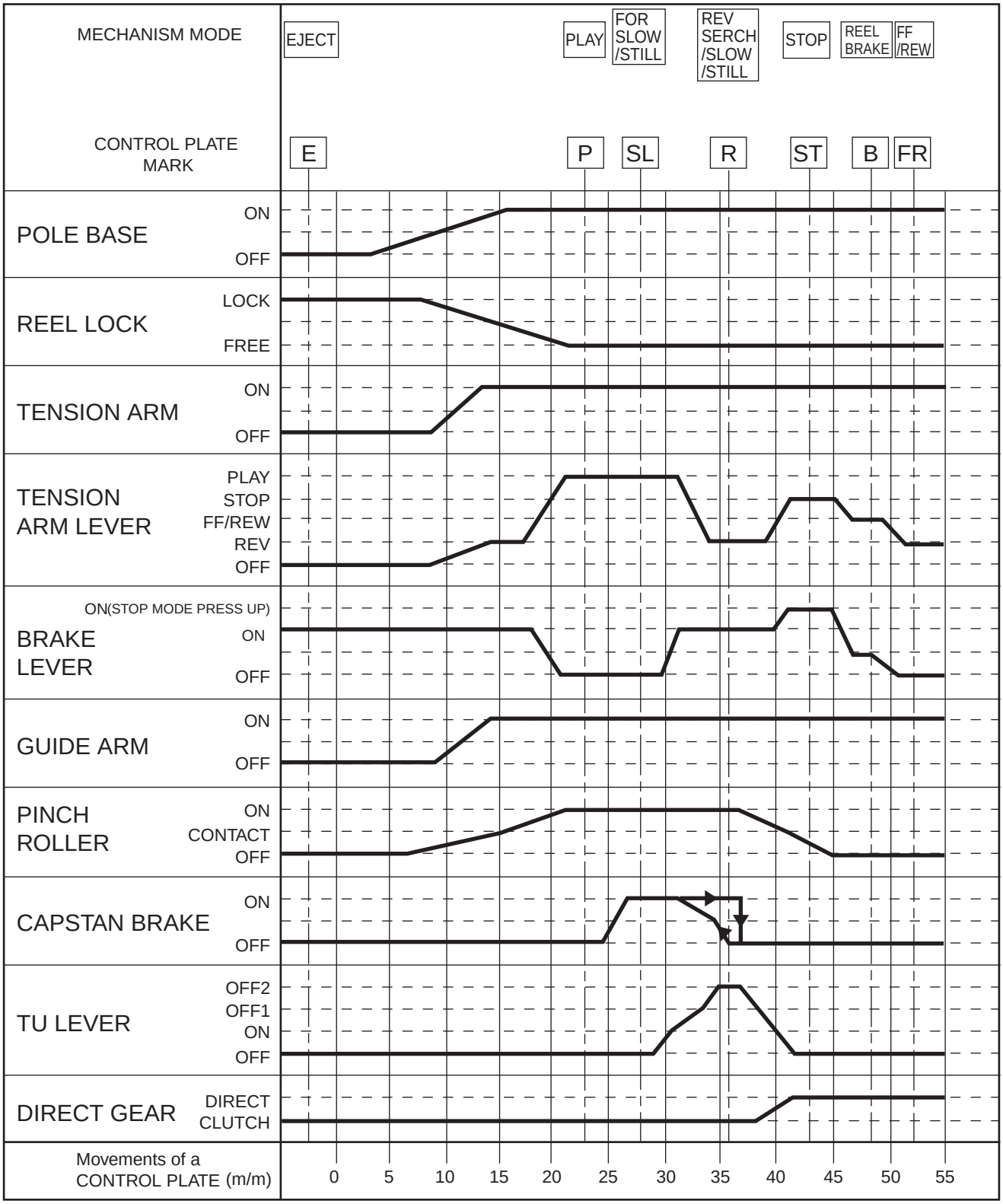


Fig.2-3-21

2.3.7 MECHANISM TIMING CHART



2.3.8 REMARKS

2.3.8.1 Cleaning

(1) For cleaning of the upper drum (particularly video heads), use fine-woven cotton cloth with alcohol soaks through. Do not move the cloth but turn the upper drum counterclockwise.

NOTE:
Make sure not to move the cloth in the vertical direction to the video head, since it may cause damage of the video heads.

(2) For cleaning of parts of the tape transport system except the upper drum, use fine-woven cotton cloth or cotton swab soaked alcohol.

(3) After cleaning, confirm that the cleaned parts are completely dry before loading the deck with cassette tape.

2.3.8.2 Applying oil and grease

(1) Periodical oiling and greasing are not required but should be done to new parts when replacing. If oil and grease on the other parts of the other party are old and dirty, wipe them clean and apply new oil or grease.

(2) For parts and points to apply oil and grease, refer to the exploded view of the 3.3 VHS MECHANISM ASSEMBLY. Fig.2-3-22 specifies oil and grease to be used.

(3) When oiling, clean the objective parts with alcohol first and apply one or two drop(s) of oil. Too much oiling causes rotary parts to slip because of oil leakage.

Classification	Part No.	Symbol in drawing
Grease	KYODO-SH-JB	AA
Oil	COSMO-HV56	BB

specifies oil and grease to be used

Fig.2-3-22

JVC

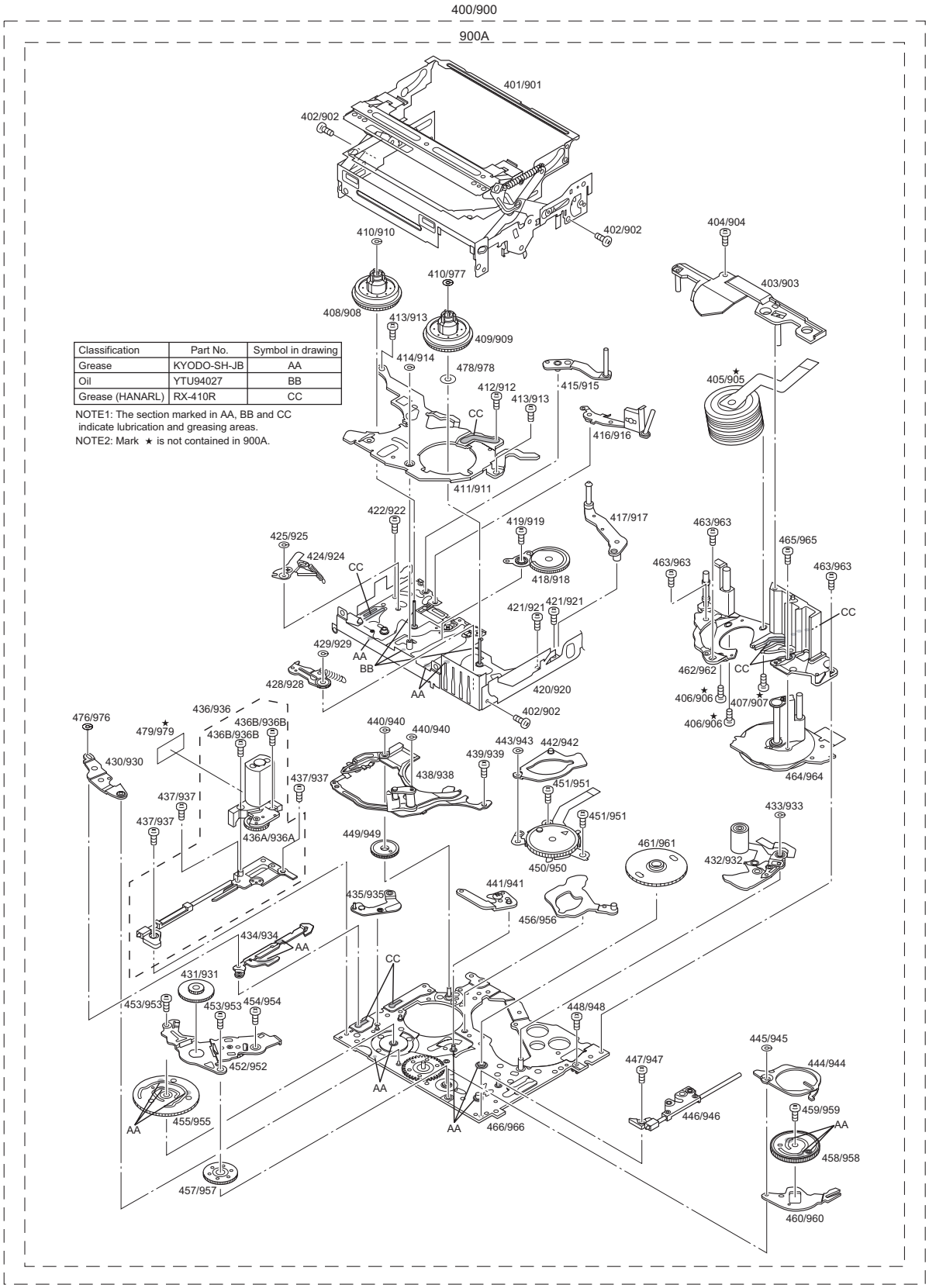
VICTOR COMPANY OF JAPAN, LIMITED
AV & MULTIMEDIA COMPANY CAMCORDER CATEGORY 12, 3-chome, Moriya-cho, kanagawa-ku, Yokohama, kanagawa-prefecture, 221-8528, Japan

(No.86700)

Printed in Japan
200304WPC

SECTION 3
PARTS LIST

3.1 DVC MECHANISM ASSEMBLY



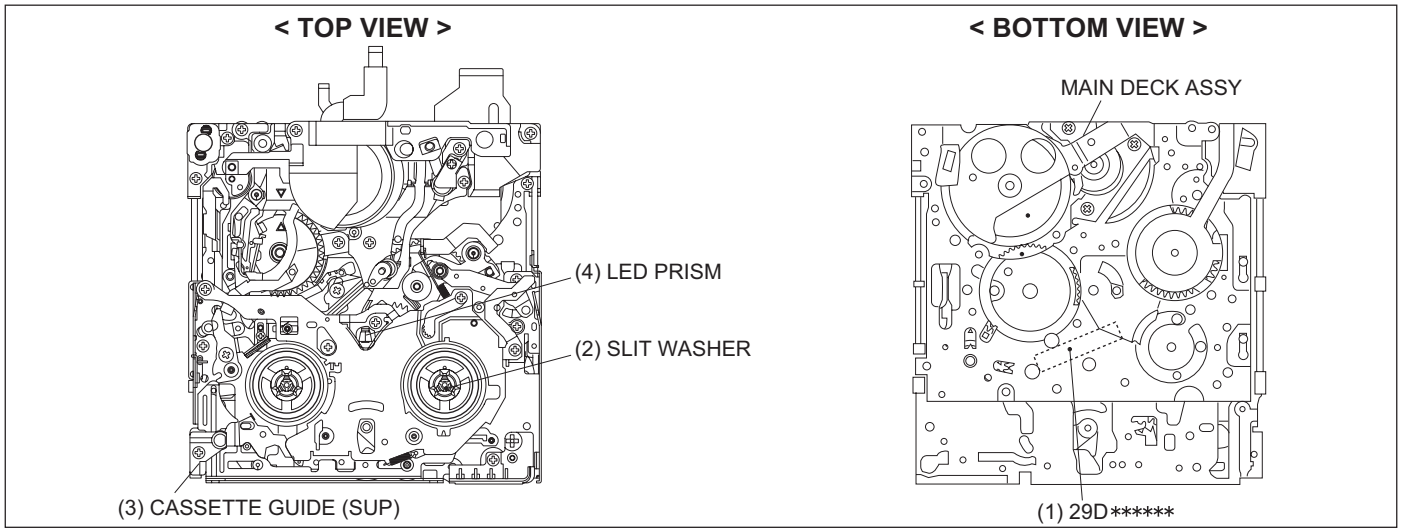
Classification	Part No.	Symbol in drawing
Grease	KYODO-SH-JB	AA
Oil	YTU94027	BB
Grease (HANARL)	RX-410R	CC

NOTE1: The section marked in AA, BB and CC indicate lubrication and greasing areas.
NOTE2: Mark ★ is not contained in 900A.

Fig.3-1-1

3.1.1 DVC MECHANISM ASSEMBLY PART LIST

- Since parts numbers described here are the numbers at the time of manualissue, they are subject to change without notice. Therefore, be sure to see a parts list in the service manual of each model as for parts numbers.
- To distinguish the mechanism assembly with the symbol number of 400-499 from the mechanism assembly with the symbol number of 900-999, see the following procedures.
  (1) See the numbers on the backside of the MAIN DECK ASSY.
  For example, "29D******" is printed on the backside of the mechanism assembly with the symbol number of 900-999 (YMA0029D in this example). See the first three characters and numbers from the left.
  (2) See the color of the SLIT WASHER on the REEL DISK (TU).
  A red slit washer is used (the same color as a slit washer of CASSETTE GUIDE (SUP)) in the mechanism assembly with the symbol number of 400-499. A black slit washer is used in the mechanism assembly with the symbol number of 900-999.
  However, the black slit washer may be changed into a red one for the purpose of parts unification.
  (3) See the color of the CASSETTE GUIDE(SUP).
  Light-brown CASSETTE GUIDE(SUP) is used in the mechanism assembly with the symbol number of 400-499.
  Black CASSETTE GUIDE(SUP) is used in the mechanism assembly with the symbol number of 900-999.
  (4) See the shape of the LED PRISM. LED PRISM consists of only resin in the mechanism assembly with the symbol number of 400-499.
  Upper part of the LED PRISM is covered with black metal in the mechanism assembly with the symbol number of 900-999.



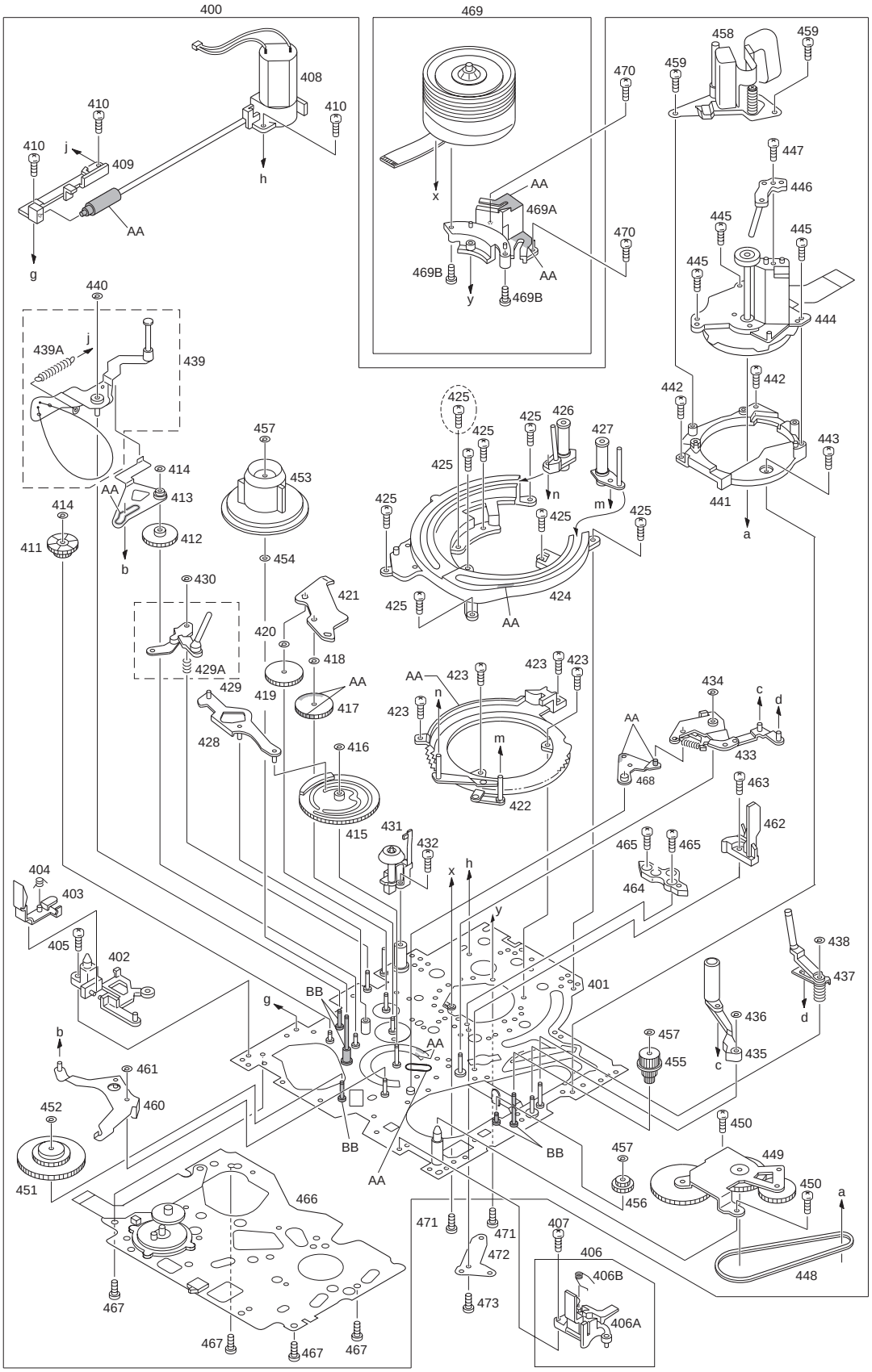
Part Name	Symbol No.	Part No.	Part No.	Part No.	Symbol No.	Part No.	Patr No.
MECHA(A) ASSY	400	YMA0029C	YMA0029M	YMA0029L	900	YMA0029H	YMA0029E
MECHA(A)ASSY	-	-	-	-	900A	YMA0029D	-
CASSETTE HOUSING ASSY	401	LY31543-002E*	LY31543-002H	←	901	LY32870-001G*	LY32870-001J
MINI SCREW,X3	402	YQ43893-8	←	←	902	←	←
UPPER BASE ASSY	403	LY31542-001J	←	←	903	LYH30420-001A	←
MINI SCREW	404	YQ43893*	QYSPSPU1425M	←	904	←	←
DRUM ASSY	405	**	**	**	905	**	**
DAMP.SCREW ASSY,X2	406	LY42820-001A	←	←	906	←	←
DAMP.SCREW ASSY	407	LY42820-002A	←	←	907	←	←
REEL DISK ASSY (SUP)	408	LY31538-001B*	LY31538-001F	←	908	←	←
REEL DISK ASSY (TU)	409	LY31538-002B*	LY31538-002H	LY31538-002G	909	LY31538-002H	←
SLIT WASHER,X2 or X1	410	YQ44246,(x2)	←,(x2)	←,(x2)	910	←*,(x1)	←,(x2)
REEL COVER ASSY	411	LY10217-001A*	LY10217-001F	←	911	LY10372-001D	←
MINI SCREW	412	LY42120-001A*	LY42120-002A	←	912	←	←
MINI SCREW,X2	413	LY41945-003A	←	←	913	←	←
SLIT WASHER	414	YQ44246	←	←	914	←	←
TENSION ARM ASSY	415	LY42025-001C	←	←	915	LY43725-001D	←
SLANT POLE ARM ASSY	416	LY31535-001F	←	←	916	LYH40269-001A	←
TU ARM ASSY	417	LY42031-001G*	LY42031-001K	←	917	LY43731-001F	←
SWING ARM ASSY	418	LY31531-001D	←	←	918	←	←
MINI SCREW	419	YQ43893	←	←	919	←	←
SLIDE DECK FINAL ASSY	420	LY20530-003B*	LY20530-003E	←	920	LYH30424-001A	←

Part Name	Symbol No.	Part No.	Part No.	Part No.	Symbol No.	Part No.	Patr No.
MINI SCREW,X2	421	YQ43893	←	←	921	←	←
MINI SCREW	422	LY43023-001A	←	←	922	←	←
PAD ARM ASSY	424	LY31533-001E	←	←	924	LYH30419-001A	←
SLIT WASHER	425	YQ44246	←	←	925	←	←
TU BRAKE ASSY	428	LY42016-001B	←	←	928	LYH40270-001A	←
SLIT WASHER	429	YQ44246	←	←	929	←	←
TENSION CONTROL LEVER ASSY	430	LY41959-001B	←	←	930	LY43684-001A	←
CENTER GEAR	431	LY31525-001B	←	←	931	LY32861-001A	←
PINCH ROLLER ARM FINAL ASSY	432	LY31516-001E	←	LY31516-001F	932	←	←
SLIT WASHER	433	YQ44246	←	←	933	←	←
TENSION CONTROL PLATE ASSY	434	LY41956-001C	←	←	934	LY43681-001A	←
BRAKE CONTROL LEVER ASSY	435	LY41962-001B*	LY41962-001C	←	935	LY43687-001A	←
MOTOR BRACKET ASSY	436	LY20525-002C	←	←	936	LYH30421-001A	←
LOADING MOTOR	436A	QAR0138-001	←	←	936A	←	←
TAPPING SCREW,x2	436B	LY41940-001A	←	←	936B	←	←
MINI SCREW,x3	437	YQ43893	←	←	937	←	←
GUIDE RAIL ASSY	438	LY20528-001R*	LY20528-001U	←	938	LYH30422-001A	←
MINI SCREW	439	YQ43893	←	←	939	←	←
SLIT WASHER,X2	440	YQ44246	←	←	940	←	←
SLIDE LEVER2 ASSY	441	LY31498-001C	←	LY31498-001D	941	LY32843-001A	←
LOADING PLATE ASSY	442	LY41965-001A	←	←	942	LY43690-001A	←
SLIT WASHER	443	YQ44246	←	←	943	←	←
EJECT LEVER	444	LY31522-001B	←	←	944	LY32858-001A	←
SLIT WASHER	445	YQ44246	←	←	945	←	←
BASE R ASSY	446	LY41929-001E*	LY41929-001F	←	946	LYH40271-001A	←
MINI SCREW	447	YQ43893	←	←	947	←	←
MINI SCREW	448	LY41945-001B	←	←	948	←	←
MODE GEAR	449	LY41930-001A	←	←	949	LY43665-001A	←
ROTARY ENCODER	450	QSW0876-003	←	←	950	←	←
MINI SCREW,X2	451	YQ43893	←	←	951	←	←
GEAR COVER ASSY	452	LY31524-001A	←	←	952	LY32860-001A	←
MINI SCREW,X2	453	YQ43893	←	←	953	←	←
MINI SCREW	454	YQ43893-4	←	←	954	←	←
MAIN CAM ASSY	455	LY41948-001C	←	←	955	LY43676-001A	←
SLIDE ARM ASSY	456	LY41941-001B	←	←	956	←	←
CONNECT GEAR 2	457	LY41951-001B	←	←	957	LY43678-001A	←
SUB CAM ASSY	458	LY41954-001B	←	LY41954-001E	958	←	←
MINI SCREW	459	LY42120-001A	←	←	959	←	←
CONTROL ARM ASSY	460	LY41952-001A	←	←	960	LY43692-001A	←
REEL GEAR 1	461	LY31523-001B	←	←	961	LY32859-001A	←
DRUM BASE ASSY	462	LY31508-002A*	LY31508-002B	LY33372-001A	962	LY31508-002B	←
SCREW,X3	463	QYSPSPU1425M	←	←	963	←	←
CAPSTAN MOTOR	464	QAR0142-001	←	←	964	←	←
MINI SCREW	465	YQ43893	←	←	965	←	←
MAIN DECK ASSY	466	LY10210-001D*	LY10210-001G	←	966	LY10367-001D*	LY10367-001E
SLIT WASHER	476	YQ44246	←	←	976	←	←
SLIT WASHER	477	-	-	-	977	YQ44246-6	-
WASHER	478	-	-	-	978	LY42047-005A	←
SPACER	479	-*	LY43987-001B	←	979	←	←

NOTE:

MARK ← is same as left.
MARK - is not used.
MARK * reference model was also changed.
MARK ** shows different parts number, depending on models.

3.2 VHS-C MECHANISM ASSEMBLY



Classification	Part No.	Symbol in drawing
Grease	KYODO-SH-JB	AA
Oil	YTU94027	BB

NOTE: The section marked in **AA** and **BB** indicate lubrication and greasing areas.

Fig.3-2-1

3.2.1 VHS-C MECHANISM ASSEMBLY PARTS LIST

- Since parts numbers described here are the numbers at the time of manualissue, they are subject to change without notice. Therefore, be sure to see a parts list in the service manual of each model as for parts numbers.

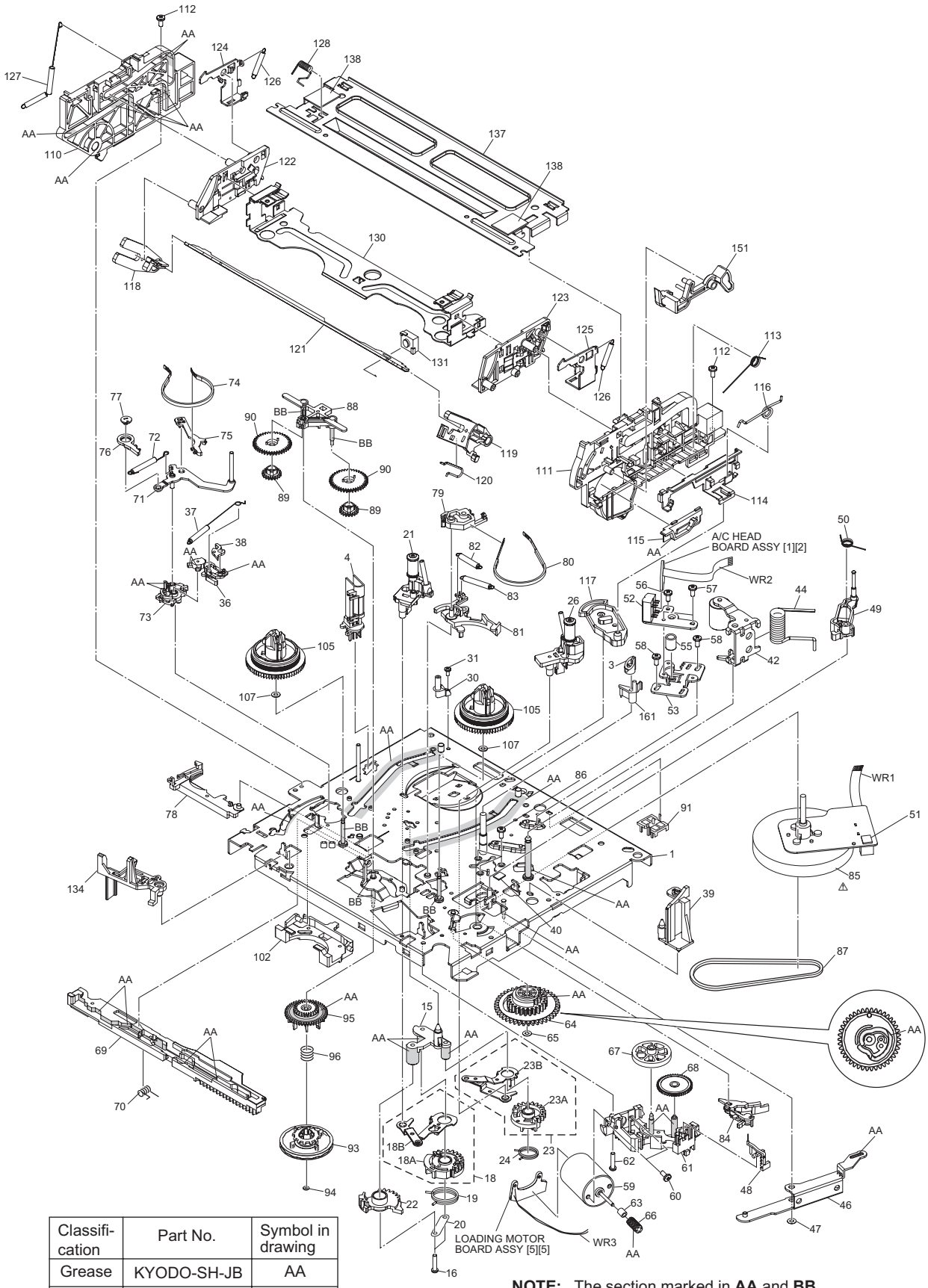
Part Name	Symbol No.	Part No.	Part No.	Part No.	Part No.	Part No.
MECHA(B) ASSY	400	YMA0033A-E	YMA0042A-E	YMA0034A-E	YMA0036A-E	YMA0040A-E
MAIN DECK ASSY	401	LY20612-001B	←	←	←	←
CASSETTE GUIDE (LEFT)	402	LY31817-001A	←	←	←	←
SW LEVER (LEFT)	403	LY31815-001A	←	←	←	←
TORSION SPRING	404	LY42581-001A	←	←	←	←
SCREW	405	LY42722-001A	←	←	←	←
CASSETTE GUIDE ASSY(RIGHT)	406	-	-	YQ44339A-7	←	←
SW.LEVER(RIGHT)	406A	-	-	YQ32162-1-3	←	←
TORSION SPRING	406B	-	-	YQ44340-1-4	←	←
SCREW	407	-	-	LY42819-001A	←	←
MOTOR BRACKET ASSY	408	LY31826-001A	←	←	←	←
WORM BRACKET	409	YQ20793	LY20951-001A	YQ20793	←	LY20951-001A
SCREW,X3	410	LY42722-001A	←	←	←	←
WHEEL GEAR	411	LY31925-001A	←	←	←	←
MIDDLE GEAR	412	LY42730-001A	←	←	←	←
CANCEL LEVER ASSY	413	LY42521-001A	←	←	←	←
SLIT WASHER,X2	414	LY42754-003A	←	←	←	←
CONTROL CAM	415	YQ20827-2-1	←	←	←	←
SLIT WASHER	416	PQM30017-25	←	←	←	←
LOADING GEAR(T)ASSY	417	LY42733-001A	←	←	←	←
SLIT WASHER	418	LY42754-003A	←	←	←	←
LOADING GEAR(S)ASSY	419	LY42732-001A	←	←	←	←
SLIT WASHER	420	LY42754-003A	←	←	←	←
COVER PLATE	421	LY42403-001A	←	←	←	←
LOADING RING ASSY	422	LY42452-001A	←	←	←	←
SCREW,X4	423	LY42728-001A	←	←	←	←
GUIDE RAIL	424	LY10239-001A	←	←	←	←
SCREW,X8 or X7	425	LY42728-001A,(X8)	←,(X7)	←,(X8)	←,(X8)	←,(X7)
POLE BASE(S)ASSY	426	LY30161-001B	←	←	←	←
POLE BASE(T)ASSY	427	LY30162-002A	←	←	←	←
DRIVE LEVER ASSY	428	LY42523-001A	←	←	←	←
SLANT ARM ASSY	429	LY42545-001B	LY44000-001B	LY42545-001B	←	LY44000-001B
TORSION SPRING(S)	429A	LY42547-001A	LY43992-001A	LY42547-001A	←	LY43992-001A
SLIT WASHER	430	LY42754-003A	←	←	←	←
ROLLER BASE ASSY	431	LY42739-003A	←	←	←	←
SCREW	432	LY42722-001A	←	←	←	←
LINK ARM ASSY	433	LY42494-001A	←	←	←	←
SLIT WASHER	434	PQM30017-25	←	←	←	←
PINCH ROLLER ARM ASSY	435	LY40018-002A	←	←	LY40018-005A	←
SLIT WASHER	436	PQM30017-25	←	←	←	←
TAKE UP GUIDE ARM ASSY	437	LY42541-001B	←	←	←	←
SLIT WASHER	438	LY42754-003A	←	←	←	←
TENSION ARM ASSY	439	LY42571-001A	←	←	←	←
TENSION SPRING	439A	LY42669-001A	←	←	←	←
SLIT WASHER	440	LY42754-003A	←	←	←	←
MOTOR BASE	441	YQ20797-1-5	←	←	←	←
SCREW,X2	442	LY42722-001A	←	←	←	←
SCREW	443	YQ44460	←	←	←	←
CAPSTAN MOTOR	444	QAR0212-001	QAR0212-002	QAR0212-001	QAR0212-002	←
TAPPING SCREW,X3	445	YQ44304	←	←	←	←
SLANT POLE BASE ASSY	446	LY42731-001A	←	←	←	←
TAPPING SCREW	447	YQ44304	←	←	←	←
TIMING BELT	448	YQ43710-2	←	←	←	←
CENTER PULLEY UNIT	449	LY42678-001A	←	←	←	LY42678-003A

Part Name	Symbol No.	Part No.	Part No.	Part No.	Part No.	Part No.
SCREW,X2	450	LY42722-002A	←	←	←	←
SUPPLY CLUTCH ASSY	451	LY42670-001A	←	←	←	←
SLIT WASHER	452	LY42754-003A	←	←	←	←
REEL DISC	453	YQ31861-1-7	←	←	←	←
WASHER	454	LY42755-001A	←	←	←	←
TAKE UP GEAR	455	LY31924-001A	←	←	←	←
BRAKE SUB GEAR	456	LY42738-001A	←	←	←	←
SLIT WASHER,X3	457	LY42754-003A	←	←	←	←
A/C HEAD UNIT	458	LY42544-001B	LY42544-002A	LY42544-001B	←	LY42544-002A
SCREW,X2	459	SPSN1750Z	←	←	←	←
EJECT LEVER ASSY	460	LY42517-001A	←	←	←	←
SLIT WASHER	461	LY42754-003A	←	←	←	←
LED GUIDE	462	YQ31833-1-1	←	←	←	←
SCREW	463	LY42722-001A	←	←	←	←
DRUM SPACER	464	LY42729-001A	←	←	←	←
SCREW,X2	465	LY42722-001A	←	←	←	←
ROTARY ENCODER	466	QSW0888-001	←	QSW0888-002	←	←
SCREW,X4	467	LY42722-002A	←	←	←	←
LINK LEVER	468	LY31814-001A	←	←	←	←
DRUM FINAL ASSY	469	**	**	**	**	**
CATCHER	469A	YDM1003-1-5	←	←	←	←
SCREW,X2	469B	QYSPSPU1735M	←	←	←	←
SCREW,X2	470	LY42722-001A	←	←	←	←
SCREW,X2	471	SPSH1740Z	←	←	←	←
BRUSH	472	LY43542-001A	←	←	←	←
SCREW	473	LY42722-003A	←	←	←	←
CASSETTE HOUSING FINAL ASSY	*155/481	LY31808-001C	LY31808-002C	LY31808-001C	LY31808-001D	LY31808-002C
SCREW,X4	*156/482	LY42722-003A	←	←	←	←
BRACKET(MECHA)	*161/484	LY32326-001A	←	←	←	←
SCREW,X2	*162/485	LY42722-003A	←	←	←	←
SIDE BRACKET L	*164/487	LY31807-001A	←	←	←	←
SCREW	*165/488	LY42722-003A	←	←	←	←

NOTE:

MARK ← is same as left.
MARK - is not used.
MARK * are shown in the parts list of FINAL ASSY of service manual of each model.
MARK ** shows different parts number, depending on models.

3.3 VHS MECHANISM ASSEMBLY



Classification	Part No.	Symbol in drawing
Grease	KYODO-SH-JB	AA
Oil	COSMO-HV56	BB

NOTE: The section marked in **AA** and **BB** indicate lubrication and greasing areas.

Fig.3-3-1

3.3.1 VHS MECHANISM ASSEMBLY PARTS LIST

- Since parts numbers described here are the numbers at the time of manualissue, they are subject to change without notice. Therefore, be sure to see a parts list in the service manual of each model as for parts numbers.

System		VHS		S-VHS	
**Job No.		V15D Series	V16D Series	V15S Series	V16S Series
Part Name	Symbol No.	Part No.	Part No.	Part No.	Part No.
MAIN DECK ASSY	1	LP21039-001N	LP21039-001S	LP21039-001R	LP21039-001S
GUIDE POLE CAP	3	LP40097-002D	←	←	←
FULL ERASE HEAD	4	QAH0082-001	←	←	←
LOAD.GEAR BASE	15	LP30958-001B	←	←	←
SCREW,X2	16	QYTPST2620Z	←	←	←
LORD.GEAR(SUPPLY) ASSY	18	LP40798-001A	←	←	←
LORD.GEAR(SUPPLY)	18A	LP21040-001A	←	←	←
LORD.ARM(SUPPLY) ASSY	18B	LP40799-001A	←	←	←
TORSION SPRING(SUPPLY)	19	LP40837-001A	←	←	←
FIXING PLATE	20	LP40903-001A	←	←	←
POLE BASE ASSY(SUPPLY)	21	LP40806-001D	←	←	←
LOAD GEAR	22	LP30959-002A	←	←	←
LORD. GEAR(TAKE UP) ASSY	23	LP40802-001B	LP40802-001C	LP40802-001B	LP40802-001C
LORD. GEAR(TAKE UP)	23A	LP21041-001B	LP21041-001C	LP21041-001B	LP21041-001C
LORD.ARM(TAKE UP) ASSY	23B	LP40803-001A	←	←	←
TORSION SPRING(TAKE UP)	24	LP40838-001A	←	←	←
POLE BASE ASSY(TAKE UP)	26	LP40808-001F	LP40808-001E	←	←
ARM BASE	30	-	←	LP31020-004A	←
SCREW	31	-	←	QYTDST2606Z	-
TU LEVER	36	LP21055-001E	←	←	←
TENSION SPRING	37	LP40943-001A	←	←	←
T-UP HEAD	38	LP40859-001D	←	←	←
LID GUIDE	39	LP30961-001C	←	←	←
SPACER	40	LP30002-0B7A	←	←	-
PINCH ROLLER ARM ASSY	42	LP40810-001A	←	←	←
TORSION SPRING	44	LP40840-001C	LP40840-001D	←	←
PRESS LEVER	46	LP30963-001B	←	←	←
SLIT WASHER	47	PQM30017-24	←	←	←
S-SWITCH	48	-	←	LP40930-002E	←
GIDE ARM ASSY	49	LP40813-001D	←	←	←
TORSION SPRING	50	LP40841-001A	←	←	←
SPACER	51	LP30002-090A	←	←	-
A/C HEAD	52	QAH0081-001	←	←	←
HEAD BASE	53	LP30965-001A	←	←	←
COMPRESSION SPRING	55	LP40842-001A	LP40842-001D	LP40842-001A	LP40842-001D
SCREWX1 A/C HEAD	*56	QYTDST2006M	←	←	←
A/C HEAD SCREW,X2	*57	LP41036-001A	←	←	←
SCREW,X2 A/C HEAD	*58	QYTDST2606Z	←	←	←
LOADING MOTOR	59	QAR0023-001	←	←	←
SCREW,X2	60	QYTPSP3003Z	←	←	←
MOTOR BRACKET	61	LP21056-002F	LP21056-002G	←	←
TAP SCREW	62	QYTPST2620Z	←	←	←
WORM BEARING	63	LP40814-001B	←	←	←
CONTROL CAM	64	LP21044-001D	←	←	←
SLIT WASHER	65	PQM30017-24	←	←	←
WORM GEAR	66	LP40815-001A	←	←	←
HELICAL GEAR	67	LP40816-001B	←	←	←
CONNECT GEAR	68	LP40817-001A	←	←	←

System		VHS		S-VHS	
**Job No.		V15D Series	V16D Series	V15S Series	V16S Series
Part Name	Symbol No.	Part No.	Part No.	Part No.	Part No.
CONTROL PLATE	69	LP10400-001H	←	←	LP10400-001J
TORTION SPRING	70	LP40843-001A	←	←	←
TENSION ARM ASSY	71	LP40818-001B	←	←	←
TENSION SPRING	72	LP40844-001C	LP40844-001E	LP40844-001D	LP40844-001E
TENSION ARM BASE	73	LP21045-001D	←	←	←
TENSION BAND ASSY	74	LP40821-001A	←	←	←
BAND HOLDER-1	75	LP30967-001B	←	←	←
BAND HOLDER-2	76	LP30968-001C	←	←	←
ADJUST PIN	77	LP40822-002B	←	←	←
TENSION ARM LEVER	78	LP31000-005E	←	←	←
MAIN BRAKE(TAKE UP)	79	LP21046-001C	←	←	←
BAND BRAKE ASSY	80	LP40824-001A	←	←	←
BRAKE LEVER	81	LP30969-002A	LP30969-002B	LP30969-002A	LP30969-002B
TENSION SPRING	82	LP30003-033B	←	←	←
TENSION SPRING	83	LP30003-035B	←	←	←
CAPSTAN BRAKE ASSY	84	LP40825-001B	←	←	←
CAPSTAN MOTOR	85	QAR0204-002	←	←	←
SCREW,X3 CAPSTAN MOTOR	86	QYTPSG2606M	QYTPSG2606Z	QYTPSG2606M	QYTPSG2606Z
BELTCAPSTAN MOTOR	87	LP30005-010A	←	←	←
IDLER ARM	88	LP30970-001A	←	←	←
IDLER GEAR 1,X2	89	LP40828-004A	←	←	←
IDLER GEAR 2,X2	90	LP40829-001B	LP40829-002A	LP40829-001B	LP40829-002A
WIRE HOLDER	91	LP31014-001A	←	←	←
CLUTCH UNIT	93	LP40934-001B	←	←	←
SLIT WASHER	94	PQM30017-47	←	←	←
DIRECT GEAR	95	LP30973-001A	←	←	←
COMPRESS. SPRING	96	LP40939-001A	←	←	←
CHANGE LEVER	102	LP30974-001B	←	←	←
REEL DISK,X2	105	LP21049-001A	←	←	←
SPACER,X2	107	LP30017-004A	←	←	←
SIDE FRAME(L)	110	LP10401-001F	LP10401-001H	LP10401-001F	LP10401-001H
SIDE FRAME(R)	111	LP10402-001F	LP10402-001K	LP10402-001G	LP10402-001K
SCREW,X2	112	QYTDST2606Z	←	←	←
TORSION SPRING	113	LP40917-001C	LP40917-001D	←	←
SIDE PLATE	114	LP30976-001D	LP30976-001E	←	←
LIMIT PLATE	115	LP30977-002D	←	←	←
LIMIT SPRING	116	LP40846-001C	←	←	←
DRIVE LEVER	117	LP31100-001B	←	←	←
DRIVE ARM(L)	118	LP30978-001B	←	←	←
DRIVE ARM(R)	119	LP30979-001H	LP30979-001N	LP30979-001H	LP30979-001N
TORSION SPRING	120	LP40847-001B	←	←	←
CONNECT PLATE	121	LP30980-001A	LP30980-001E	LP30980-001B	LP30980-001E
SIDE HOLDER(L)	122	LP10403-001C	←	←	←
SIDE HOLDER(R)	123	LP10404-001D	LP10404-001E	←	←
LOCK LEVER(L)	124	LP30983-001A	LP30983-001B	LP30983-001A	LP30983-001B
LOCK LEVER(R)	125	LP30984-001A	LP30984-001B	LP30984-001A	LP30984-001B
TENSION SPRING,X2	126	LP40924-001C	LP40924-001D	←	←
EARTH SPRING(1)	127	LP40856-001A	←	LP40856-001B	LP40972-001A
EARTH SPRING(2)	128	LP40857-001B	←	←	←
C.HOLDER ASSY	130	LP30981-001E	LP30981-001G	LP30981-001F	LP30981-001G
C.H STOPPER	131	LP31135-001A	-	LP31135-001A	-

System		VHS		S-VHS	
**Job No.		V15D Series	V16D Series	V15S Series	V16S Series
Part Name	Symbol No.	Part No.	Part No.	Part No.	Part No.
R.SAFETY LEVER	134	LP21051-002C	←	←	←
TOP FRAME	137	LP21052-001F	LP21052-001J	LP21052-001H	LP21052-001J
SPACER	138	LP30002-0A7A	-	LP30002-0A7A	-
DOOR OPENER	151	LP30985-001G	←	←	←
TAPE GUIDE	161	-	LP40993-001A	-	LP40993-001A
E-CARD WIRE DRUM.M	WR1	WJT0059-001C	WJT0059-001E	WJT0059-001D	WJT0059-001E
E-CARD WIRE AC HEAD CN2001	WR2	WJT0067-001B	←	←	←
E-FL/RB WIRE LOADING MOTOR	WR3	WJS0022-001A	←	←	←
MEMO	-	PMD0035B-C	PMD0040A-C	PMD0036B-C /PMD0039A-C	PMD0037A-C /PMD0041A-C

NOTE:

MARK ← is same as left.
MARK - is not used.
MARK * shows that Symbol No. and Parts No. may sometimes be different from those in each manual. See the table below for final Symbol No. and Parts No.
MARK ** is Job No.
To identify a model, see the Job No. of the model.
Job No. is shown just above the service manual number at the lower right of the service manual of each model.